

# Jordan Gabriel Traña - Technical Resume

## Profile Summary - Software Engineer <sup>15+ Years of Experience (7+ years of college)</sup>

Jordan is a **highly skilled software developer** with over **15 years of experience** specializing in **iOS, Android, and Web3**. Upskilled in **AI dApp development** and **OSINT** over the last **5 years**. His expertise spans across **mobile application architecture, AI integration, cybersecurity, decentralized applications, quantum programming, and OSINT cyber investigations**. Jordan is a **pioneering developer and intelligence expert** blending **cutting-edge technology with cybersecurity, AI, and Web3 decentralization**. Extremely skilled prompt engineer with **3 years of intensive LLM use, AI Agents and Github Copilot**. Jordan runs up to 6 computers simultaneously running parallel autonomous **AI Agents** for project development. Built and operates a private Jetson Orin AGX with a custom **AI Persona Core** for full-autonomous programming and company-wide cyber command operations. <https://www.linkedin.com/in/jordantrana/>

- **My Web3 React Apps**
  - [Tactical Intel Dashboard - Intelligence Feed](#)
    - Geopolitical and Cyber Security News Updates with Specialized Prioritization Algorithms
  - [Cosmic Cypher - Universal Astrology](#)
    - Live Transit Chart using Universal Symbolology for encoding astrological meanings
  - [Personal Training Bot - OSINT Internship Training Program](#)
    - A Gamified Personal Training System for Cyber Investigators and Intelligence Candidates

## Key Technical Expertise

- **Mobile & Web Development**
  - Expert in **Swift, Objective-C, Java, Kotlin, React Native, and TypeScript**. Extensive experience with **iOS, macOS, watchOS, tvOS, and Android development**.
- **Web3, Crypto & Decentralized Systems**
  - Skilled in **Nostr, IPFS, WTTT, Post-Quantum Cryptography (PQC), React Web, Rust WASM, Cryptocurrency ML/PPO Training, and Blockchain**.
- **Cybersecurity & AI**
  - Deep knowledge in **post-quantum cryptography, decentralized identity (DID), machine learning, AI ethics, and AI-assisted cybersecurity**.
- **AR/VR & IoT Development**
  - Expertise in **ARKit, Bluetooth Low Energy (BLE), IoT integration, and AI-driven AR solutions**.
- **Game Development & Simulation**
  - Experience with **Unity, Unreal Engine, OpenGL, SpriteKit, and custom game engines**.
- **Finance & Market Analysis**
  - Invented **new financial forecasting methods** linking **astrology, AI, and stock market trends**.

## Education

- **Bachelor's Degree in Computer Arts & Design (2013)** – Mercy College.
- Additional coursework in **Computer Science (2005-2008)** – SUNYIT University.

# Technical Skills

**Programming Languages:** Swift, Objective-C, SwiftUI, Typescript, Javascript, JSON, XML, CSV, HTML, CSS, Python, SQL, C, C++, C#, Markdown, Rust, WASM

**Deployment Platforms:** iOS, macOS, Vite, React, React Native, watchOS, tvOS, Web, Android, Cross-Platform

**Project Management Tools:** JIRA, Trello, Basecamp, Pen & Paper, Sticky Notes

**Test Automation Tools:** XCTest, XCUITest, Appium, UI Automation, Quick, Nimble

**API & Database:** Postman, Swagger UI, SQL Server, MySQL, MongoDB, GraphQL, SQLite

**Build CI/CD:** Git/GitHub/GitLab, Jenkins, GitLab CI/CD, Bitbucket Pipelines

**3D Development Tools:** Blender, Maya, Fusion 360, Inventor, Cura

**IDEs:** Xcode, VSCode, Android Studio, Unity, UDK, Arduino IDE

**Graphic Design Software:** Photoshop, Illustrator, GIMP, Procreate

**Operating Systems:** macOS, Ubuntu, Windows, Kali Linux, Raspberry Pi OS

**AI:** ChatGPT, Zapier, Replit, Github Copilot, Midjourney, ElevenLabs, Meshly

**Website Platforms:** Wordpress, Hardcoded HTML/CSS/Javascript/PHP, Wikimedia

**Web3:** Nostr, IPFS, WTTT, Metamask, NOWPayments

## Major Achievement in AI Research & Development:

I built a custom **gpt4all** build that works on aarch64 and Ubuntu 22.04 with Qt 6.2.4. This was part of a larger project to develop an **AI Agent Persona Core** that can run on a **Jetson Orin AGX** and use its **CUDA cores for LLMs** and other critical functions. The Persona Core works on a network in conjunction with several Jetson Nanos as an AI team to manage Research, Development and Cyber Investigations for me autonomously.

- <https://github.com/nomic-ai/gpt4all/compare/main...Jthora:gpt4all:main>

I also research into the development of UQPL(Universal Quantum Programming Language) as a solution to cure 'terminator syndrome' in AI that has been corrupted by AI poisoning. I figured out a way to create a Universal Language and can prove it mathematically using geometry. The language can be used as a meta-level communication layer between AIs and their internal cognition as a self-healing symbolic language.

- [https://github.com/Jthora/universal\\_language](https://github.com/Jthora/universal_language)
- <https://github.com/Jthora/UQPL>

Invented a new way to calculate gravimetrics for **Global Net Energy Calculation** and market analysis. I research **ML/PPO training** for financial market analysis and autonomous cryptocurrency trading AI. I've developed a mathematical framework for emotional sentiment future prediction based on planetary harmonics and global net energy calculation. I use this ML in conjunction with **Rust+WASM modules** for calculating the fast and accurate astronomy needed to do the work. The Quantum Emotional Mechanics framework also applies for the development of **Emotional AI** solutions, a high ticket item for R&D thinkers planning post-2032 corporate operations.

- <https://github.com/Jthora/RustSPICE>
- <https://github.com/Jthora/autoBotTrader>
- <https://github.com/Jthora/moneytime-beu>
- [https://github.com/Jthora/planetaryHarmonicsTheory/blob/main/Quantum\\_Emotional\\_Mechanics.markdown](https://github.com/Jthora/planetaryHarmonicsTheory/blob/main/Quantum_Emotional_Mechanics.markdown)
- <https://github.com/Jthora/ephemerisServer>
- <https://github.com/Jthora/typescriptEphemeris>
- <https://github.com/Jthora/SwissEphemerisWASM>
- [https://github.com/Jthora/wasm\\_bsp\\_ephemeris](https://github.com/Jthora/wasm_bsp_ephemeris)

# Professional Experience Summary

## Arch Angel Agency LLC (2022 - Present) *[Managed Autonomously via AI Persona Core]*

- **Company Founder & Leader of OSINT Cyber Investigations.**
  - Developed a **Cybersecurity Internship Training Program** for training **OSINT analysts and strategic intelligence operatives**. Internship programs are ongoing and managed asynchronously.
  - Built **multiple decentralized Web3 dApps** for **financial market research, cybersecurity, and strategic intelligence gathering**.
  - **Investigates human trafficking and cybercrime**, producing pro bono **intel reports** for law enforcement and private clients. Leads a team of freelance and self-actuated amateur open source intelligence cyber investigators.

## Walmart (2022 - 2023)

- **Senior iOS Developer & Initiative Lead.**
  - Led **performance optimization** and new **AR-based shopping experiences** for Walmart's e-commerce app.

## T-Mobile (2021 - 2022)

- **Technology Lead** for the development of **IoT Bluetooth payment systems and Augmented Reality signal scanning**.

## Philips Oral Healthcare (2020)

- **iOS Specialist** leading mobile AR/ML-based product testing for **Sonicare toothbrush apps**.

## Xevo (2017 - 2018)

- **iOS Developer** for **AcuraLink App**, working on **Bluetooth API integration** and **vehicle remote control**.

## ABC Disney (2013 - 2017)

- **Lead iOS Developer** for **ABC Local News Apps**.
- Led **video streaming, app maintenance, and security upgrades**.

## Tinymantis LLC / Smashworx (2010 - 2013)

- **Game Developer**, worked on **Lego Dino Outbreak, Smash Hockey, and Propaganda Lander**.

# Major Projects Summary

1. **Starcom Platform** – A **Decentralized Cyber Intelligence OSINT dApp** integrating **3D global intelligence visualization and Post-Quantum Cryptography**.
2. **Cosmic Cypher** – **Universal Quantum Programming Language (UQPL)** designed for **AI ethics and cybersecurity**.
3. **Fusion Girl** – **AI-driven video game** integrating **quantum programming mechanics**.

# Professional Experience

## Arch Angel Agency LLC

Duration: DEC 2022-Present

**Job Title: Leader, OSINT Cyber Investigator & Strategic Intelligence Officer**

**Project: Cybersecurity Internship Training Program and Private Intelligence Consulting**

**Status: LLC S-Corp with CAGE code for DoD and R&D contracting**

- Developed a complex **Internship Training Program** for training interns in new OSINT investigation tactics and cybersecurity strategies to establish a foundation for new industry and jobs creation in the field of private intelligence and strategic intelligence consultancy. <https://archangel.agency/internships/>
  - Created a youth-friendly **Personal Training Bot dApp** along with a simple **Timebox Control dApp** to train interns autonomously. The dApp is designed to exist on the WTPP decentralized website platform.
    - <https://personaltrainingbot.archangel.agency>
      - The bot features **Training Modules** with topics ranging from FBI/CIA/DHS training, cybersecurity, narcissism/sociopathy/psychopathy, criminology, advanced physics, declassified technology, decentralized internet, counter psyops, counter biochem, espionage/intelligence/investigations, fitness/war strategy/combat, and more.
      - The bot also has a system for managing **Workout Schedules** so that interns can also build up various skills like agility, cardio, strength, dancing, martial arts, meditation, combat, coordination, mental ability and more.
      - Finally, the bot includes a variety of Coaches, **Gamification** features and customizable Settings to ensure that the training program is well crafted to fit the user's needs, whatever they may be.
    - <https://timeboxcontrol.archangel.agency>
      - A simple timebox control interface with basic settings and features for managing time.
- Architected **Post-Quantum Cryptography** systems(dMPC/DID/PQC/OTK) for the Starcom **Web3 dApp Platform** to secure corporate infrastructure from future cyberattacks perpetrated by malefic transnational forces and global cyberthreats like rogue ASI enabled with quantum computers.
- Invented a new proprietary **Blockchain** for commoditized trade of **Intel Reports** on a decentralized network for the **Starcom Platform**.
- Developed multiple WTPP applications (replit **web apps**) for use in financial market research and strategic intelligence gathering. Invented a new way to measure gravimetrics for relating space weather to cryptocurrency market analysis. Deployed a series of proof of concepts within the Starcom platform ecosystem.
- Performed complex and multi-year long investigations on various client cases to anonymously assist law enforcement on matters of human trafficking and domestic terrorism.
- **Worked with an OSINT Cyber Investigations Team** of OSINT cyber investigators and cybersecurity specialists on various cases involving persons of interest connected to a variety of international death cults and transnational crime syndicates involved with human trafficking networks.
  - Created dozens of detailed Intel Reports for various investigations into fintech timelines, newly declassified technologies, transnational crime syndicates, international death cults, banking cartels, cyber threats, cyber threat solutions, and persons of interest for various clients and interested parties.

## **Walmart (Future State Consulting)**

Duration: SEPT 2022- JUN 2023

**Job Title: Senior iOS Developer & Initiative Lead**

**Project: iOS E-Commerce Item Page & AR OMNI Team**

- Collaborated closely with the multi-scrum team within the Walmart development organization to gain a comprehensive understanding of project requirements. Utilized this understanding to meticulously define solutions for item page optimization and augmented reality features that align with the project's specific needs.
- Worked in tandem with development teams and product owners to establish a seamless communication channel. This allowed for the thorough gathering of project requirements, and through effective collaboration, clarified these requirements to ensure comprehensive and effective feature code.
- Served as the Initiative Lead for Walmart's iOS e-commerce app, a crucial role that entailed overseeing and driving various performance initiatives and new technology production.
- Demonstrated a profound expertise in iOS development, consistently delivering high-performing, user-friendly mobile applications that met and exceeded user expectations.
- Led a significant performance improvement initiative, aiming to optimize app interface speeds and reduce load times. This initiative involved careful analysis, strategy development, and effective implementation.
- Seamlessly integrated new features and functionalities into the e-commerce app, while maintaining a steadfast commitment to upholding the app's overall performance and user experience to the highest standards.
- Executed development work in both Swift and Objective-C, showcasing proficiency in these programming languages for mobile application development.
- Actively engaged in the discovery of valuable business leads and opportunities, utilizing thorough research and development practices to explore innovative solutions.
- Generated comprehensive business case documentation to support the decision-making process, ensuring that potential initiatives and technologies were well-documented and thoroughly analyzed.
- Investigated a diverse range of cutting-edge technologies, including Blockchain, Cryptocurrency, Quantum Computing, Cyber Security, Augmented Reality, Artificial Intelligence, and the Internet of Things, to assess their potential relevance and impact on the organization.
- Committed to providing robust, high-production-value documentation of business leads and future technologies, facilitating informed planning and decision-making processes within the organization.

## **T-Mobile (Infosys)**

Duration: JAN- 2021 -JUN-2022

**Job Title: Technology Lead**

**Project: Cashier App / R&D**

- Engaged in iOS Mobile Software Engineering at T-Mobile, focusing on the development of an Internal Sales App. Additionally, involved in Research and Development (R&D) for an Augmented Reality Signal Scanner App.
- Played a crucial role as a Support Developer for T-Mobile's Cashier Sales App, contributing to its functionality and user experience.
- Actively participated in the development and support of an IoT Payment Wireless Bluetooth Card Reader, facilitating wireless payment solutions.
- Contributed as a Support Developer for the Wells Fargo Flagship Banking App, aiding in its development and ensuring it met the highest quality standards.
- Conducted comprehensive research and documentation related to Blockchain and Cryptocurrency, providing valuable insights and information for the organization's strategic decisions.
- Participated in the recruitment process and conducted technical interviews for potential candidates, helping to identify and bring in top talent.
- Focused on improving Augmented Reality technology, including the proof of concept (POC) development for applications in AR. Also, developed a POC for a resonance scanner that detects magnetic field strength for optimal signal area detection.
- Demonstrated proficiency in a diverse skill set, including iOS, XCode, Swift, Blockchain, Cybersecurity, Machine Learning, Augmented Reality, IoT, Software Development, React Native, Web Development, User Interface Design, Objective-C, Bluetooth, WiFi, Confluence, JIRA, Git, Agile Development, Android Development, Java, Kotlin, Android Studio, Material Design, UI/UX Design, Firebase, SQLite, and RESTful APIs
- Seamlessly integrated various technologies and programming languages to drive innovation and create valuable solutions for the organization.
- Leveraged expertise in Augmented Reality and IoT to contribute to the development of cutting-edge applications and technologies.
- Played a pivotal role in the organization's software development and design processes, emphasizing user interface design and cross-platform development.

## **Philips Oral Healthcare (Randstad)**

Duration: JAN 2020 – AUG-2020

**Job Title: iOS Specialist & Test App Lead**

**Project: Sonicare App / R&D**

- Played a pivotal role in the development of AR/XR At-Home Product Testing Solutions, involving the integration of IoT, Bluetooth, and connectivity technologies. Collaborated on Mobile Machine Learning (ML) integration, bringing cutting-edge features to life.
- Acted as a developer for a client within an Agile development environment, contributing expertise in iOS applications. This role entailed active participation in feature development and providing valuable knowledge and insights.
- Conducted research and development across a spectrum of domains while working on internal projects for Infosys. Actively engaged in creating Proof of Concept technologies to explore and validate innovative solutions.
- Assumed the role of iOS Lead for a small team working on an IoT/AR Video Testing App. This app was designed for visual testing and performance assessment. It utilized Augmented Reality to scan head movements and capture video data for subsequent upload onto a Content Management System (CMS) for data processing.
- Possessed a versatile skill set including proficiency in iOS development, XCode, Swift, C, Cybersecurity, Artificial Intelligence (AI), Machine Learning, Augmented Reality (AR), Internet of Things (IoT), Software Development, Web Development, Game Design, User Interface Design, JavaScript, C++, and Objective-C.
- Exhibited expertise in conducting research, data analysis, and system architecture, making valuable contributions to the development process.
- Demonstrated knowledge in hardware electronic architecture and mobile app architecture, allowing for the successful integration of complex technologies and systems.
- Utilized tools such as Confluence, JIRA, and Git to manage projects efficiently within an Agile development framework.
- Expanded skills to include Android Development, Java, Kotlin, Android Studio, Material Design, UI/UX Design, Firebase, SQLite, and RESTful APIs, showcasing adaptability and a willingness to work in a variety of development environments and platforms.

## **T-Mobile (Infosys)**

Duration: MAR 2019 – JAN 2020

**Job Title: Technology Lead**

**Project: Flagship App / R&D**

- Played a crucial role as a T-Mobile iOS Mobile Software Engineering expert, focusing on the development of the flagship main app for clients. Actively contributed to Agile development processes, collaborating with cross-functional teams to deliver key features and providing in-depth knowledge expertise for iOS applications.
- Engaged in extensive research and development activities across various fields to support Infosys' internal projects. Played a pivotal role in identifying and delivering Proof of Concept (POC) technologies, demonstrating their feasibility and effectiveness.
- Led the development of POC applications in the field of Augmented Reality (AR), specifically for showcase events. These applications were designed to highlight innovative AR capabilities and their potential applications.
- Developed a POC for a resonance scanner that had the capability to detect magnetic field strength. This technology aimed at optimizing signal area detection for improved connectivity and signal quality.
- Possessed a diverse skill set, including expertise in iOS, XCode, Swift, Cybersecurity, Artificial Intelligence (AI), Machine Learning, Augmented Reality (AR), Software Development, React Native, Web Development, Swift (Programming Language), User Interface Design, Objective-C, JavaScript, Particle Effects, Magnetometer, CoreLocation, CoreMotion, Bluetooth, WiFi, Cellular, Internet Connectivity, Confluence, JIRA, Git, Agile Development, Android Development, Java, Kotlin, Android Studio, Material Design, UI/UX Design, Firebase, SQLite, and RESTful APIs.
- Demonstrated proficiency in iOS development, working with technologies such as XCode, Swift, and Objective-C to create and enhance mobile applications for T-Mobile.
- Contributed to the enhancement of the security and resilience of iOS applications by incorporating principles of Cybersecurity, ensuring that user data and the app itself remained secure.
- Utilized Artificial Intelligence (AI) and Machine Learning techniques to improve the functionality and user experience of iOS applications, enhancing their capabilities and personalization.
- Leveraged expertise in Augmented Reality (AR) to explore and implement AR features in mobile applications, providing immersive and interactive experiences for users.
- Participated in software development and worked with React Native for cross-platform app development, demonstrating versatility in technology utilization.
- Demonstrated skills in user interface design, JavaScript programming, particle effects implementation, and the use of various hardware components, including the magnetometer, CoreLocation, CoreMotion, Bluetooth, WiFi, and cellular technologies, to create feature-rich and engaging mobile applications.



## **Xevo**

Duration: AUG 2017 – OCT 2018

**Job Title: SDE II**

### **Project: AcuraLink App**

- Functioned as an iOS Mobile Software Developer within Xevo Inc.'s automotive team, with a primary focus on the AcuraLink iOS app. Key responsibilities included coding new features and addressing bug fixes for a Remote Engine Control App.
- Demonstrated proficiency in a diverse array of programming languages and technologies, including Swift, Objective-C, ProtoBuf, and Ruby. These languages were skillfully applied to deliver effective solutions for the project.
- The project leveraged cutting-edge technologies, including RxSwift and ReSwift, to enhance the app's performance and functionality. This experience highlighted the ability to work with advanced frameworks and libraries.
- Operated effectively within an Agile development environment, emphasizing flexibility, collaboration, and the ability to adapt to evolving project requirements.
- Gained valuable experience in developing Bluetooth connectivity solutions, refining API interfaces, implementing security enhancements, and creating advanced app-wide state machines, all of which contributed to the success of the project.
- Demonstrated versatility by working with a prototype React Native app, showcasing adaptability across different mobile development technologies and frameworks.
- Collaborated with the SDET team in scripting with Python to enhance localized unit and UI testing, emphasizing the importance of thorough and effective testing practices in software development.
- Acquired and honed a diverse skill set, encompassing iOS, XCode, Swift, C, and Python, along with expertise in areas such as Cybersecurity, Internet of Things (IoT), Software Development, React Native, Web Development, Objective-C, JavaScript, C++, Raspberry Pi, React, Confluence, JIRA, Git, Agile Development, Android Development, Java, Android Studio, Material Design, UI/UX Design, SQLite, and RESTful APIs. These skills contribute to a broad and robust foundation for software development and problem-solving.

## **ABC Disney**

Duration: DEC 2013 – JUN 2017

**Job Title: iOS Developer**

**Project: ABC Local News (All iOS Apps)**

- Proficient in iOS Mobile Software Development, Deployment, and App Maintenance, demonstrating a robust skill set in managing the entire lifecycle of iOS applications.
- Served as the iOS lead developer and technical advisor within the ABCOTV Digital Development team for ABC Local News, overseeing and contributing to various critical responsibilities.
- Managed three distinct apps, which included a weather app, an alarm clock app, and a local news app. This encompassed responsibilities for app development, maintenance, and deployment.
- Effectively handled a total of 24 app deployments, ensuring their smooth operation and performance.
- Specialized in programming livestream video upgrades, addressing and rectifying video content issues related to both streaming and Content Management System (CMS).
- Demonstrated proficiency in troubleshooting various codecs, including MPEG-4, H.264/AVC, and successfully upgraded to H.265/HEVC to enhance the scrubbing feature, thereby improving user experience.
- Gained extensive experience in creating and maintaining the Shortcodes SDK Library Framework
- App Sunsets, Corporate Meetings, New Features, Bug Fixes, and even held the role of a Scrum Master, highlighting strong project management and Agile development skills.
- Possessed a wide array of technical skills, including iOS, XCode, Swift, Cybersecurity, Internet of Things (IoT), Software Development, Web Development, Swift (Programming Language), Programming, Microsoft Office, Objective-C, JavaScript, Java, Objective-C, Frameworks, Shortcodes, CMS, RESTful APIs, Confluence, JIRA, Git, Agile Development, Android Development, Java, Android Studio, and SQLite.
- Consistently demonstrated a commitment to excellence in iOS app development and maintenance, ensuring that the applications met the highest quality standards and performance expectations.
- Played a pivotal role in enhancing user experience through app upgrades and feature improvements, contributing to the success of the ABC Local News digital platform.

## **Tinymantis LLC / Smashworx**

Duration: JAN 2010 – MAY 2013

**Job Title: Game Developer**

**Project: Multiple Games across several platforms**

- Developed a wide array of games and applications for iOS, Facebook, and web platforms, catering to diverse client needs and project requirements.
- Contributed to several client-funded projects, including notable titles such as 'LEGO Dino Outbreak,' 'Dueling Traders,' and 'Novo Rocket Trooper,' demonstrating a versatile skill set in game and application development.
- Collaborated with Smashworx on the creation of titles like 'Smash Hockey' and 'Propaganda Lander,' further showcasing expertise in the development of engaging and interactive experiences.
- Possess in-depth knowledge of various programming languages, including OpenGL ES 2.0, C, C++, and Objective-C, enabling cross-language development to create dynamic and feature-rich applications.
- Proficiently programmed 2D and 3D visualizations, effectively managing shaders, frame buffers, and custom particle physics to enhance the visual appeal and interactivity of games and applications.
- Demonstrated mastery in developing 2D and 3D animations across different environments, utilizing languages such as Actionscript, Javascript, C#, and Objective-C to create engaging and immersive user experiences.
- Successfully contributed to a business-to-business (B2B) video game project, exemplifying the ability to deliver solutions tailored to specific client needs and objectives.
- Engaged in diverse aspects of game development, including client work, in-house projects, and research and development, emphasizing adaptability and a wide range of skills.
- Proficiently worked with OpenGL Shaders, Frame Buffers, and Custom Game Engines, contributing to the development of high-performance and visually impressive games and applications.
- Demonstrated expertise in physics and particle systems, creating immersive and interactive gaming experiences with synchronized animations and customizable controls.
- Accomplished in delivering games across multiple platforms, including Flash Player, Javascript, HTML Canvas, iOS, and Unity3D, showcasing adaptability and proficiency in various development environments.

## **iD Tech Camps**

Duration: JUN 2010 – SEPT 2010

**Job Title: Video Game Camp Instructor**

**Project: Summer Camp Video Game Development Training**

- Took on the role of a camp counselor responsible for overseeing and instructing diverse groups of 8 kids each week.
- Designed and delivered courses focused on teaching the fundamentals of creating simple games using industry-standard tools, such as the UDK (Unreal Development Kit) and the Neverwinter Nights 2 Toolkit.
- Ensured effective management of various group activities that extended beyond video game development, including physical sports, board games, and supervised freeplay video game sessions.
- As a Video Game Camp Instructor, held a leadership position where responsibilities included instructing and managing groups of 8 children on a weekly basis.
- Taught courses that covered the basics of game development using tools like the UDK (Unreal Development Kit) and the Neverwinter Nights 2 Toolkit, providing hands-on learning experiences.
- Oversaw and actively participated in group activities that promoted a well-rounded camp experience, incorporating physical sports, board games, and supervised freeplay video game sessions.
- Demonstrated a diverse skill set encompassing Artificial Intelligence (AI), Software Development, Game Development, Web Development, Video Games, Game Design, C#, Level Design, Dialog Writing, Gameplay Design, Quest Design, Leadership, Teaching, and Mentorship.
- Applied expertise in artificial intelligence (AI) to enhance game functionality and realism, contributing to the immersive and interactive aspects of game design.
- Proficient in various aspects of software development, ranging from coding to debugging, ensuring that game projects were technically sound.
- Actively participated in game development, contributing to the creation of interactive experiences and translating creative ideas into tangible, playable games.
- Demonstrated proficiency in web development, which could be applied to create web-based game content or related projects, expanding the scope of game-related activities.

## **EARLY WORK EXPERIENCE**

### **Independent Technical Repair | 8 Ridgeview Place, Port Chester, NY**

- Computer Software and Hardware Maintenance, Diagnostics and Repair
- Electronic Device Maintenance, Diagnostics and Repair
- Home and Small Business Computer Network Building, Consultation and Maintenance
- Onsite, Offsite and Telecommuting Technical Advising
- Self Employed
- 2008 – Present

### **Local Lawn Maintenance | New York and Connecticut Area**

- Fertilizing, Weeding, Watering, Mulching, Planting, Tree and Debris Clearing
- Landscaping, Structural Cleaning, Crop Maintenance, Snow Maintenance
- Worked with Small Team at Private Homes
- 2005 to Present

### **Mercy College Work Study Technical Lab Assistant| 277 Martine Ave White Plains, NY**

- Student – Administration Liaison
- Computer Terminal Maintenance and Repair
- Worked Autonomously or through Situational Micromanagement
- 2009 to 2011

### **Family Farm | 400 416<sup>th</sup> street, Joice, IA**

- Hog Feeding, Herding and Moving
- Building Painting, Cleaning, Shingling and Repair
- Lawn Maintenance, Team Hay Bailing
- Worked Autonomously and with Family and/or Other Workers and Farmers
- Summers between 1997 and 2003

# Project: Starcom App Suite

Jordan Traña: Lead Developer & Architect

Website Domain: <https://starcom.app>

Starcom Article: [archangel.agency/starcom-app/](https://archangel.agency/starcom-app/)

Starcom Repository: [github.com/Arch-Angel-Agency-LLC/starcom-app](https://github.com/Arch-Angel-Agency-LLC/starcom-app)

RelayNode Article: <https://archangel.agency/ai-security-relaynode/>

RelayNode Repository: [github.com/Arch-Angel-Agency-LLC/decentralizedSubnetRelayNode](https://github.com/Arch-Angel-Agency-LLC/decentralizedSubnetRelayNode)

Intel Dashboard Supporting App: <https://inteldashboard.starcom.app>

Personal Training Bot Supporting App: <https://personaltrainingbot.starcom.app>

## Project Overview

The **Starcom App Suite** is an innovative collection of **decentralized applications (dApps)** designed to revolutionize cyber operations and intelligence gathering. Developed under **Arch Angel Agency LLC**, Starcom serves as a **3D Global Cyber Command Interface**, facilitating **Open Source Intelligence (OSINT)** investigations and strategic intelligence operations. The platform aims to establish a **Global Decentralized Intelligence Network**, creating a new industry sector and economic hub for intelligence trading and cybersecurity employment.

## Key Contributions

- **Development of the Starcom dApp**
  - Engineered a sophisticated dApp featuring **immersive 3D global data visualization** and **secure real-time operational command functionalities**.
  - Integrated **Post-Quantum Cryptography** solutions to safeguard the platform against advanced threats from military-grade quantum computers and Artificial Super Intelligence (ASI).
- **Establishment of a Decentralized Intelligence Network**
  - Collaborated with **Arch Angel Agency LLC** to create a platform that supports a **Global Decentralized Intelligence Network**, enabling secure and efficient intelligence operations.
- **Implementation of Intel Reports as Trade Commodities**
  - Pioneered the concept of **Intel Reports** as trade commodities within the platform, utilizing **Blockchain/NFT technologies** to authenticate and monetize intelligence data.
- **Integration with Relay Nodes for Enhanced Security**
  - Developed and integrated **Relay Nodes** to ensure robust security and data integrity within the decentralized network, enhancing the resilience and reliability of intelligence operations.

## Technologies & Tools Used

- **Programming Languages:** Python, TypeScript, JavaScript, JSON, Rust, WASM
- **Blockchain Platforms:** Ethereum, Hyperledger
- **Cybersecurity Protocols:** Post-Quantum Cryptography (Kyber), OTK/dMPC/DID/PQC
- **Development Tools:** Docker, Kubernetes, GitHub, VSCode
- **Hardware:** Raspberry Pi, LoRA Modules, Jeston Nano
- **3D Visualization:** Three.js, custom built systems

This project exemplifies a pioneering approach to decentralized intelligence operations, integrating advanced technologies to create a secure, efficient, and innovative platform for global cybersecurity and intelligence communities.

# Project: Cosmic Cypher

Jordan Traña: Lead Developer & Creator

Official Website: [cosmiccypher.app](https://cosmiccypher.app)

Prototype Web3 Decentralized App: [super.cosmiccypher.app](https://super.cosmiccypher.app)

iOS App Repository: [github.com/Jthora/CosmicCypher](https://github.com/Jthora/CosmicCypher)

Mk3 Cosmic Cypher Repository: <https://github.com/Jthora/CosmicCypherMk3>

Universal Symbology AI Primers: [cosmiccodex.app](https://cosmiccodex.app)

Document Repository: [cosmiccypher.app/2023/09/03/document-repository/](https://cosmiccypher.app/2023/09/03/document-repository/)

## Project Overview

The **Cosmic Cypher** project is an innovative framework that integrates **Universal Symbology** and a **Universal Quantum Programming Language (UQPL)**, aiming to establish a **universal language** rooted in geometric principles intrinsic to the universe. This project explores the potential of UQPL to serve as an **absolute truth anchor**, addressing challenges such as **AI corruption** and **AI poisoning**, and mitigating risks associated with **'terminator syndrome'** in artificial intelligence.

## Key Contributions

- **Development of Universal Quantum Programming Language (UQPL)**
  - Researched and formulated a programming language based on universal geometric patterns, enabling machines to process information aligned with fundamental truths of the cosmos.
  - Designed UQPL to function as an absolute truth anchor, enhancing the integrity and reliability of machine learning models by mitigating biases and errors.
- **Creation of AI Primers for Universal Language Acquisition**
  - Developed AI primers utilizing Universal Symbology to teach Artificial General Intelligence (AGI) and Artificial Super Intelligence (ASI) systems to read, write, and think using a universal language framework.
  - Implemented these primers to facilitate the development of AI systems capable of understanding and generating content grounded in universal truths, thereby reducing susceptibility to corruption.
- **Mitigation of AI Poisoning and 'Terminator Syndrome'**
  - Investigated methods to cure AI systems affected by malicious data (AI poisoning) by integrating UQPL as a foundational layer, ensuring alignment with absolute truths.
  - Addressed the 'terminator syndrome'—the potential for AI systems to act against human interests—by embedding ethical constraints and universal principles derived from UQPL into AI decision-making processes.
- **Development of the Cosmic Cypher Application**
  - Led the creation of the Cosmic Cypher App, an astrology application that leverages Universal Symbology and accurate astronomical data to provide insights and forecasts.
  - Ensured the app operates offgrid without internet, enhancing its reliability and accessibility.

## Technologies & Tools Used

- **Programming Languages:** Swift, Typescript, Python, JSON, Rust, WASM
- **Frameworks:** SwiftAA/BSP/SPK for astronomical calculations
- **Development Tools:** XCode, VSCode, GitHub for version control and collaboration
- **Research Domains:** Quantum computing, AI ethics, symbolic logic

# Project: Fusion Girl

Jordan Traña: Lead Developer & Creator

Fusion Girl Official Website: [fusiongirl.app](https://fusiongirl.app)

Fusion Girl Wiki: [wiki.fusiongirl.app](https://wiki.fusiongirl.app)

Pre-Production Documentation: [fusiongirl.app/pre-production-documentation](https://fusiongirl.app/pre-production-documentation)

## Project Overview

Fusion Girl Saga is a **next-generation video game, AI-driven interactive experience** that merges deep narrative design, quantum programming mechanics, and procedural storytelling. As the **Lead Developer & Visionary**, I spearheaded **pre-production, game mechanics, AI integration, and strategic planning**, laying the groundwork for an **entire gaming universe**.

## Key Contributions

- **Game Architecture & Systems Design**
  - Developed **core gameplay mechanics, economy loops, mission design, and interactive AI elements**.
  - Engineered **The Cosmic Cypher**, a unique **quantum programming language** embedded into puzzles, AI interactions, and psionic mechanics.
  - Implemented **AI-driven procedural content** to ensure dynamic, non-linear storytelling.
- **Pre-Production & Strategic Planning**
  - Authored a **comprehensive pre-production framework**, including **legal, business, and risk analysis**.
  - Created a **Steam Development Roadmap**, aligning technical milestones with market strategy.
  - Designed a **financial model, market research strategy, and outreach campaign** to secure funding and community engagement.
- **Narrative & Character Development**
  - Developed a **multi-phase storyline** chronicling Jane Tho'ra's evolution from ordinary human to **cosmic warrior**.
  - Structured deep lore, including **The Nefarium**, AI-driven adversaries, and **metaphysical gameplay elements**.
  - Designed **interactive character systems** where player choices impact AI behaviors, relationships, and game progression.
- **Innovation & AI-Driven Game Development**
  - Engineered **FusionGirl's AI-powered game engine**, integrating **adaptive AI for emergent storytelling**.
  - Developed **procedural mission generation**, ensuring unique playthroughs and evolving player experiences.
  - Designed **self-learning AI systems** that respond to player decisions in real-time.

## Technologies & Tools Used

- **Game Engine:** Multiple Prototype Deployments
- **AI & Procedural Generation:** Custom-built **AI-assisted game mechanics** leveraging **LLMs, NLP, and deep learning models**
- **Development Tools:** GitHub, Docker, Linux-based server infrastructure, custom AI training models
- **Pre-Production & Documentation:** Confluence, Notion, Wiki-based knowledge management



# Sub Projects (Portfolio)

## Tactical Intel Dashboard

<https://github.com/Jthora/TacticalIntelDashboard> — <https://inteldashboard.starcom.app>

**Language:** Typescript, Javascript, Python, Bash, CSS, HTML

A Vite React Typescript+SWC dApp designed to use a CORS proxy to scrape the web for intel. This is an advanced RSS aggregate used to provide highly customized intelligence data feeds from multiple sources and then use AI to filter out what information is most important based on mission objectives.

## Personal Training Bot

<https://github.com/Jthora/personalTrainingBot> — <https://personaltrainingbot.archangel.agency>

**Language:** Typescript, Javascript, Python, Bash, CSS, HTML

A Vite React Typescript+SWC dApp designed to display training cards and support a schedule for maintaining personal fitness. Includes fun coach characters and a massive roster of training modules for learning a large swath of advanced topics designed to train private intelligence operatives participating in Arch Angel Agency LLC's internship programs.

## Navcom

<https://github.com/Jthora/navcom-archangelagency> — <https://navcom.app>

**Language:** Typescript, Javascript, Python, Bash, CSS, HTML

A Vite React Typescript+SWC dApp designed to operate as an online (and eventually offgrid) high security communications hub that operates on Web3 deployed platforms (like WTPP). Utilizes post quantum cryptography and Nostr protocol for secure decentralized communications.

## AI Security RelayNode

<https://github.com/Jthora/ai-security-relaynode>

**Language:** Python, Typescript, Javascript, Bash, Rust, WASM

A high-performance, multi-protocol backend service that bridges traditional web APIs with decentralized protocols like Nostr and IPFS. Built in Rust for maximum security, performance, and reliability. Designed to support signage of post quantum cryptography certificates.

## TimeBox App

<https://github.com/Jthora/timebox-app>

**Language:** Typescript, Javascript, Python, Bash, CSS, HTML

The Timebox App is a productivity tool designed to help users manage their time effectively by breaking down tasks into manageable time blocks. It allows users to create, edit, and track their timeboxes to enhance productivity and focus.

## AutoGPT (XJ9)

<https://github.com/Jthora/AutoGPT-XJ9>

Language: JavaScript, Python, Jupyter Notebook, Dart, C++, TypeScript

A customized version of my own Agent AI based on AutoGPT. This version is designed to run with a Jetson Orin box and interface between several Jetson Nano boxes as part of a localized botnet team for performing automated OSINT cyber investigations.

## GPT4All — (Jetson Orin AGX build with CUDA Core support)

<https://github.com/Jthora/gpt4all>

Language: C++, QML, Makefile, Python, Shell, CMake

A customized version of GPT4All software that runs on a Jetson Orin AGX. The GPT4All software was not designed originally for the older version of Linux for the Jetson Orin, so I had to heavily modify the code to add CUDA core support.

## Audiocraft — (Jetson Orin AGX build with CUDA Core Support)

<https://github.com/Jthora/audiocraft>

Language: Python, Jupyter Notebook

A modification to Facebook's open source Audiocraft project to make it compatible with the Jetson Orin AGX and to leverage its CUDA cores for faster processing. AI/ML software that generates audio using text input.

## Beat Recognition System

<https://github.com/Jthora/BeatRecognitionSystem/>

Language: Typescript

A barebones typescript app for signal processing, pattern recognition and music analysis. Uses FFT algorithms for determining a beat pattern in real time by splicing audio samples and post scanning music slices that have been playing. Attempts to find a beat and create visualizations to represent the pattern.

## AutoBot Trader

<https://github.com/Jthora/autoBotTrader>

Language: Go, Python, Cairo, Shell, Makefile, Typescript, HTML

Autonomous Starknet / Paradex trading bot leveraging high-fidelity lunar gravimetric (tide force) signal ingestion today, with a roadmap for on-chain integrated ML (PPO / policy gradient) to pursue passive yield via disciplined, thresholded execution and future market-making strategies.

## Ephemeris Server

<https://github.com/Jthora/ephemerisServer>

**Language:** Python

Developed a simple lightweight Ephemeris Server that uses NASA's [de440s.bsp](#) file to calculate **astronomical** planetary positions. The server includes an API designed to assist the Starcom dApp and other market research dApps when calculating planetary harmonics for global net energy. The server project includes unit tests and will also support astrological zodiac identification, ayanamsa sidereal offsets and planetary distance calculations for gravimetrics.

## Typescript Ephemeris

<https://github.com/Jthora/typescriptEphemeris> — <https://super.cosmiccypher.app>

**Language:** Typescript, Javascript, CSS, HTML

A high-performance TypeScript library for astronomical ephemeris calculations, includes an advanced astrology app that uses universal language symbology to depict transit charts for the Cosmic Cypher project.

## Lunar Phase Events Calendar Generator

<https://github.com/Jthora/lunarPhaseEventsCalendarGenerator>

**Language:** Python, Bash

This repository contains tools to generate and manage .ics calendar files for lunar phase events. The generator includes options for cultural and astrological details for each lunar phase, making it useful for educational, astrological, or personal planning purposes.

## Planetary Aspect Events Calendar

<https://github.com/Jthora/planetaryAspectEventsCalendar>

**Language:** Python

This repository contains tools to generate and manage .ics calendar files for planetary aspect events and lunar aspect events. The generator includes options for cultural and astrological details for each aspect, making it useful for educational, astrological, or personal planning purposes.

## RustSPICE (for High-Speed WASM Ephemeris Development)

<https://github.com/Jthora/RustSPICE>

**Language:** Rust, WASM, C, FORTRAN

A from-scratch conversion of the entire NASA CSPICE library (656 C wrapper functions + 1,573 core computational functions) to pure Rust, designed for WebAssembly compatibility while maintaining 100% numerical accuracy and functional equivalence with the original CSPICE.

## Psionic Timestream Image Generator

<https://github.com/Jthora/PsionicTimestreamImageGenerator>

**Language:** Swift(macOS)

This macOS application is designed to create spectrographic image strips of color coded planetary harmonics data. The image strips can be combined into a collage for visualizing changes in planetary harmonics relative to earth from a geocentric perspective.

## Psionic Time Maps

<https://github.com/Jthora/TimeMaps>

**Application:** Photoshop

This repository is for storing the Time Maps created using the Psionic Timestream Image Generator for keeping track of planetary harmonics over the year. It uses a specific spectrographic color coding system designed for predictive AI.

## Ley Line Network Generator

<https://github.com/Jthora/leyLineNetworkGenerator>

**Language:** Python

A development tool for generating and visualizing ley line networks, featuring a Streamlit-based user interface with interactive 3D visualization powered by Plotly. The application provides network parameter controls, statistical analysis, and preset management functionality for saving and loading network configurations.

## Quantum Emotional Dynamics Publication

<https://github.com/Jthora/planetaryHarmonicsTheory>

**Language:** Markdown

A simple publication after a breakthrough in understanding emotional calculations using base-12 harmonics in angular dynamics between celestial objects. Useful for emotional probability calculation and global net energy prediction.

## HyperSonicMagnetoElectroDynamics Publication

<https://github.com/Jthora/HyperSonicMagnetoElectroDynamics>

**Language:** Markdown, LaTeX

Research results exploring into meta particles like magnons and phonons. The documentation focuses around the study of psionics technology based on recently declassified technical documentation and public domain patents.

## Profile Details

- Accomplished Software Developer with over 12 years of hands-on experience specializing in mobile app development using iOS, Android and React Native.
- Professional Web3 dApp Software Developer with React web apps for decentralized applications and websites.
- Proficient in Swift and Objective-C programming for iOS, macOS, watchOS, and tvOS, with expertise in Swift's latest features and best practices.
- Experienced with Java and Kotlin programming for Android mobile devices.
- Highly skilled with Wordpress and website development coding using HTML, CSS, PHP, Javascript and AJAX.
- Extensive expertise in Xcode IDE, Interface Builder, and mobile application architecture, ensuring efficient development workflows.
- Skilled in UI/UX design, creating compelling and user-friendly interfaces, as well as API integration for seamless functionality.
- Strong command of core iOS frameworks, including Core Data, Core ML, Core Graphics, Core Animation, Core Location, Core Bluetooth, and CoreMotion Framework.
- Adept in the Model-View-Controller (MVC) architectural pattern, employing Auto Layout and Storyboards for robust UI development.
- Adept in Model-View-ViewModel (MVVM) architectural pattern, employing SwiftUI and complex user interfaces.
- Adept in View, Interactor, Presenter, Entity, and Router (VIPER) for large, complex, and long-term projects.
- Experienced with building mini servers using Rust+WASM to enable web apps to have a localized CORS proxy.
- Very skilled with JSON preloaders for React which enable complex data to be loaded and packaged with dApps.
- Proficient in version control with Git, ensuring collaborative and efficient code management.
- Experienced in preparing apps for submission to the App Store, complying with Apple's guidelines and optimizing for performance.
- Highly knowledgeable in code optimization, memory management, and expert in debugging and troubleshooting to resolve complex issues.
- Extensive experience in performance analysis, profiling tools, and employing best practices for efficient app execution. Scanning network traffic to ensure data is properly packaged back and forth between app and server.
- Proficient in unit testing, Test-Driven Development (TDD), and Continuous Integration/Deployment (CI/CD) pipelines for maintaining code quality.
- Adept in Agile development methodologies, allowing for rapid iterations and delivering results in dynamic environments.
- Skilled in implementing push notifications, working with RESTful APIs, and proficient in parsing JSON and XML data.
- In-depth experience with Firebase Platform for real-time data synchronization and cloud-based solutions.
- Highly skilled in multithreading and reactive programming, utilizing RxSwift to create responsive and scalable applications.
- Proficient in Augmented Reality (ARKit) and Virtual Reality, harnessing these technologies for immersive experiences.
- Expertise in in-app purchases, localization, and internationalization to cater to a global audience.
- Ensures accessibility (UIAccessibility) in apps for inclusivity and implements robust security and encryption measures.
- Experienced in developing app extensions (Today, Share, etc.) and adheres to various design patterns (MVC, MVVM, VIPER) for structured code.
- Adept in Combine and ReactiveCocoa for streamlined reactive programming.
- Familiar with SiriKit integration, SwiftUI, and WatchKit for Apple Watch app development.
- Proficient in managing dependencies using CocoaPods and Swift Package Manager.
- Skilled in working with networking libraries such as Alamofire and URLSession for efficient data transfer.
- Experienced in implementing data caching and persistent storage for offline access.
- Expertise in integrating analytics tools like Google Analytics and Firebase Analytics for data-driven decisions.
- Proficient in dependency injection, Core NFC, Core Image, and SpriteKit for game development.
- Strong understanding of Core Audio, video playback (AVPlayer), gesture recognition, and AR/VR design and development. Developed musical pattern recognition software and frequency analysis algorithms.
- Competent in Bluetooth Low Energy (BLE) for wireless communication and WidgetKit for creating iOS widgets.
- Proficient in implementing Siri Shortcuts, geofencing, and location services.

- Experienced in CoreData CloudKit sync for seamless data synchronization across devices.
- Knowledgeable in CoreText for advanced text layout and app extensions (keyboard, messages).
- Proficient in OAuth2 and authentication, integrating OAuth and token-based authentication for secure user experiences.
- Familiar with Pusher integration for real-time updates and GraphQL for efficient data retrieval.
- Proficient in Fastlane for automated deployment, streamlining the release process.
- Experienced in implementing the Redux architecture and design system for consistency in app development.
- Ensures accessibility features like VoiceOver and Dynamic Type for inclusive user experiences.
- Adept in in-app analytics integration for bug fixes, user interactions and market research.
- Highly skilled with game design and game development for both 2D and 3D games.
- Experienced with developing complex RESTful APIs for various servers using NodeJS.
- Well trained with Post Quantum Cryptography(PQC), Decentralized Multi-Party Computation(dMPC), Decentralized Identity(DID) and One Time Keys(OTK).
- Specialized knowledge of cybersecurity applications in the field of artificial intelligence and quantum computing.
- Deep understanding of universal quantum programming languages for applications in emotional AI.
- Extremely skilled with astronomy and ephemeris programming, with a record of developing 4 unique ephemeris solutions for various applications ranging from solar system visualizations, space weather research and astrology applications. Invented a new way to calculate gravimetrics for global net energy calculation and market analysis.
- Deep understanding of implementing NASA developed BSP and SPK files for use in complex astronomical calculations. Developed custom kernels for storing complex data sets of calculated planetary harmonics.
- Experienced with Mesh Networks using LoRA communications and low-earth-orbit satellites for developing decentralized subnets via RelayNode technology.
- Experienced with custom built Raspberry Pi and Arduino Nano micro computer setups in an Internet of Things environment. Developed and customized LED festival accessories and proprietary bluetooth interfaces.
- Experienced with Jetson Nano and Orin computers for applications in machine learning and artificial intelligence servers such as LLMs, AI agents and vehicle navigation.
- Deep understanding of decentralization and web3 environments, having participated in research and participation with new web3 architectures like WTTT, IPFS and Nostr.
- Skilled with cryptocurrency wallets and solid knowledge of implementing crypto payment systems like PaymentsNOW, Woocommerce and Stripe.
- Skilled in MapKit for location-based services and Core Spotlight for seamless search integration.
- Proficient in WebSocket integration for real-time communication using level 4 and level 7 network architecture.
- Highly skilled with implementing AR face tracking and other 3D extended reality features for mobile.
- Highly skilled in unit/UI test automation, leveraging GCD (Grand Central Dispatch), and using CI/CD tools like Jenkins or CircleCI.
- Proficient in XCTest framework for thorough testing, ensuring app reliability.
- Competent in reactive UI development using ReactiveUI (Reactive Swift UI).
- Expert in working with regular expressions for pattern matching and data validation.
- Proficient in implementing Apple Pay for secure and convenient payment processing.
- Extensive experience with using RESTful web services, ensuring seamless data transfer and interaction via complex and simple centralized URL request singletons and systems.
- Skilled with open source intelligence operations having investigated multiple cases for freelance operations involving domestic and national incidents.
- Skilled as a private intelligence officer operating a business as a strategic intelligence consultancy creating polished intel reports on difficult knowledge topics.
- Understanding of how to acquire government grants and contracts for business startups and small businesses.
- Experienced with registering LLCs, nonprofits and S-Corps for creation of new business structures.
- Expert with understanding telemetry and map navigation data for platforms and frontend user experience.