

John Kim

(551) 329-7966 | dkim37@nd.edu | johnkimdw.com | github.com/JohndKim

EDUCATION

University of Notre Dame Notre Dame, IN
Bachelor of Science in Computer Science May 2026

- **GPA:** 3.96
- **Relevant Coursework:** Operating Systems, Data Structures, Database Concepts, Java OOP, ML for Engineers

EXPERIENCE

Humana Louisville, KY
Data Analyst Intern May 2024—August 2024

- Engineered cost-saving dashboard in Power BI, eliminating 2,500+ mobility lines, saving \$2.4 million annually.
- Integrated 5 data sources in SQL, Oracle, Power Apps to create a robust pipeline reducing user time by 40%.

Lucy Family Institute of Data and Society Notre Dame, IN
Research Assistant September 2022—Present

- Published paper as 1st author on a novel relevance-aware algorithmic recourse with Bayesian optimization.
- Optimized cancer detection algorithms through grid search in Python as part of a cross-disciplinary team.

PROJECTS

Alora Finance September 2023—May 2024

- Headed team of nine undergrads, serving 800 students as beta testers to provide financial education for schools.
- Coded with ReactJS, REST Django API, and SQL, tested with Postman, and taught Git and Agile development.

Grep & Sed January 2024—Present

- Built a regex matcher in Python with a modified Dijkstra's algorithm, parsing regex to regular operations to NFAs.
- Constructed the Unix sed command with backreferences, using Turing machines to prove its NP-Completeness.

Cookie Run Kingdom Web Application June 2023—August 2023

- Architected full-stack web application with ReactJS, REST Django API, and SQL to predict arena game outcomes.
- Collaborated through Git version control and Agile while holding weekly meetings and code reviews.

Machine Learning Pickup Line Generator and Classifier May 2023—June 2023

- Created text-generating recurrent neural network in Python using TensorFlow and Keras that make pickup lines.
- Presented and articulated technical challenges and solution to over 60 students and interested professors.

K-Drama Recommendation Web Application July 2022—October 2022

- Designed application with JavaScript, Flask, and an SQL relational database to recommend K-Dramas to users.
- Scraped metadata of over 3000 K-Dramas in Python and leveraged natural language processing and TF-IDF.

LEADERSHIP AND ACTIVITIES

Atti Startup Notre Dame, IN
Lead SWE / Co-Founder December 2023—Present

- Led team of developers to create company website in ReactJS and immigrant-focused community app in Flutter.
- Raised \$20,000 pre-seed funding from Elevate Ventures and \$4,500 from R2R accelerator program with VCs.

LikeLion US Notre Dame, IN
Vice-President / Branch Co-Founder July 2023—May 2024

- Mentored students with varied coding experiences at weekly sessions, simplifying complex coding concepts.
- Organized networking events with other LikeLion branches at meetups and hackathons to raise engagement.

Student International Business Council Notre Dame, IN
Amazon Project Leader / Microsoft / Uber / PWC Project Analyst September 2022—January 2024

- Spearheaded weekly meetings with ten students and company contacts to devise innovative business solutions.
- Tackled ambiguous problems through abstract thinking, implementation timelines, and risk analysis.

TECHNICAL AND LANGUAGE SKILLS

Technical: Python, SQL, JavaScript (React), C/C++, Java, Django, Flask, TensorFlow, HTML, CSS, Bash, Processing

Development: Git, GitHub, Figma, GNU/Linux, LaTeX, Power BI, Power Apps

Interests: Full-Stack Development, Machine Learning, Recommendation Systems, Data Analytics, Social Good

Languages: English, Korean