Aryan Poonacha

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EDUCATION

Duke University & Duke Kunshan University   **May 2023**
Dual Degree B.Sc. in Data Science, GPA: 3.59/4.0   Durham, N.C and Kunshan, China
- Undergraduate Full Scholarship. Founder & former President of Gaming Club, Executive member of Board Game club.
- Relevant Coursework: Statistics, Linear Algebra, Data Modeling, SWE, Databases, Machine Learning, Statistical Modeling.

EXPERIENCE (*See my LinkedIn for more details*).

Duke University Computer Science Department   **August 2022 - Present**
Teaching Assistant For CS 307 & CS 308 - Advanced Software Design & Implementation   Durham, N.C
- Held office hours for & mentored 10 students to work in teams on large codebases (Java, JavaFX, Maven, git).
- Conducted 100+ code reviews, provided specific feedback, graded assignments, conducted review sessions.

GeorgiaTech CreateX Startup Accelerator Program   **May 2022 - Present**
Founder And Lead Developer of VR/AR Startup   Atlanta, G.A and Remote
- Established our VR gaming startup to create a farming VR game. Developed a playable VR demo (Unity, C#) presented to 4000+ attendees at public showcase, signed up 500+ beta testers so far for first closed beta in Summer 2023.

Duke University Sanford School Of Public Policy   **June 2022 – August 2022**
Research Assistant Under Dr. Nick Carnes   Durham, N.C
- Compiled dataset of American legislature candidates for sociological dataset analysis (webscraping w/ beautifulsoup).

Rhodes Information Initiative at Duke   **May - July 2022**
Data+ Summer Research Assistant At Visualizing Durham Public Schools Project   Durham, N.C
- Developed and updated an RShiny data dashboard website to visualize information of Durham public school districts for use by parents, students, teachers and school administrators (Rstudio, ggplot, Rshiny). 1000+ daily visits.

Duke University Pratt School of Engineering   **Sept 2021 – June 2022**
Research Assistant At Borsuk Lab   Durham, N.C
- Compiled labeled object detection dataset of 1 million+ images of oil tanks & containers from public aerial image data (pyqt, labelimg). Evaluated and fine-tuned parameters for CNN object detection model (Keras).

Duke Kunshan University - Statistics Dept   **June 2020 – March 2021**
Data Science Research Assistant Under Dr. Andrew MacDonald   Remote
- Created dataset with webscraping (beautifulsoup, pandas) to compile social media conspiracy posts dataset pipeline (Hadoop).
- Applied grouped NLP sentiment analysis and time analysis in R (tidyverse) and Python to apply data visualization (matplotlib, ggplot2) to research sociological & psychological features of conspiracy creators.

AcuiZen Digital Knowledge Management   **Summer 2018**
SWE Intern   Bangalore, India
- Performed data-driven competitor analyses. Updated website frontend - ~20% increase in engagement (CSS, Bootstrap).

PROJECTS

Bass Connections - Analyzing Systemic Housing Inequality, *Under Dr. Thomas DeFrantz*   **Fall 2021**
- Created big-data large-scale microeconomic models to visualize housing inequality in Durham County (pandas, hadoop, pyplot).
- Produced a fluid simulation visualization model of racial housing inequality with historical datasets (fluidsim, pandas).

HealthCarolina - Interactive Portal For North Carolina Health Info & Statistics, *Databases Final Project*   **Fall 2021**
- Worked in a team of 4 to compile large-scale county-based dataset to present differences in health statistics in an interactive N.C map. Includes features to find nearest health resources based on current location. Hosted online (Flask, Postgresql, MySQL).

Predicting Willingness To Vote, *Duke Datathon 2021*   **Fall 2021**
- Used Asian Barometer dataset to make an SVM voter apathy prediction model with demographic predictors. 84% test accuracy (pandas, scikit).

Bollywood Music Generation Deep Learning Model, *Under Dr. Daniel Lim*   **Fall 2020**
- Created RNN model and trained on Bollywood music datasets to generate Bollywood music samples (Keras, music21).

SKILLS

Spoken Languages: English (native), French (proficient), Kannada (proficient), Hindi (elementary), Mandarin (elementary).
Programming Languages: R, Python, SQL, C/C++, and Java.
Frameworks: Pandas, NumPy, Matplotlib, Keras, PyTorch, TensorFlow, Flask in Py. STL in C++. Bootstrap, jQuery.

CERTIFICATIONS & AWARDS

- GeorgiaTech's Robotech Hackathon 2022: Best Overall Hack, Second Best Design, Most Accessible Hack. 3000$ in prizes and 5000$ in startup seed funding.
- National Finalist, *Alibaba GET Global Startup Challenge.*
- Online Certifications: Deep Learning Specialization and Introduction to ML, *Coursera.* CS50, *EdX.*