Chan Park

cpark036@gmail.com | 8582549798 | LinkedInURL | Personal Website

EDUCATION

Duke University   Durham, North Carolina
Bachelor of Science - Computer Science, Concentration - AI/ML   *August 2020 - May 2024*
Minors - Economics and Philosophy   *GPA: 3.76*
Courses: *Data Structures and Algorithms, Computer Architecture, Design and Analysis of Algorithms, Database Systems, Discrete Math,*
Multivariable Calculus, Econometrics, Advanced Data Science, Microeconomics, Probability, Linear Algebra, Artificial Intelligence

TECHNICAL SKILLS

- **Languages & Frameworks**: C, C#, Java, Javascript, Python, Scheme, SQL | Angular.js, Express.js, Flask, React.js, Vue.js
- **Tools & Libraries**: AWS, Blender, Figma, GCP, Git, Jenkins, Postman, Unity | Matplotlib, Pandas, PyTorch, Scikit, Three.js

WORK EXPERIENCE

- **Capital One**   Richmond, Virginia
  Software Engineering Intern   *June 2023 - Present*
  - Pioneered submission and search capabilities into a feedback form **Micro Frontend** component with API endpoints in the backend for frontend (BFF) and enterprise API layers, streamlining the feedback collection process for 16,000+ users
  - Architected a scalable **AWS OpenSearch** index to store feedback form data and harmonized it with the enterprise API endpoints, enabling powerful search capabilities with reduced search query response time

- **Duke University**   Durham, North Carolina
  Research Assistant   *May 2023 - Present*
  - Optimized **hyperparameter search** for a gradient descent based **assisted learning** algorithm using **AutoML** in PyTorch
  Teaching Assistant   *August 2022 - May 2023*
  - Orchestrated weekly one-on-one Office Hours and conducted weekly recitations of 25+ students for courses "Data Structures and Algorithms" and "Design and Analysis of Algorithms," aiding comprehension and fostering algorithmic development

- **Cigna Health**   Bloomfield, Connecticut
  Application Developer Intern   *May 2022 - August 2022*
  - Integrated **Google Analytics** into a fitness campaign app using Angular.js to track interactions of 40,000 users and created **Cloudwatch Dashboards** to monitor AWS server/database health in realtime. Dashboards helped decrease annually occurring issues regarding overloaded EC2 instances, ELB, and AWS RDS for MySQL by 80%
  - **Multithreaded** a Python3 **web scraper** that translated the organization hierarchy of Cigna's 70,000 employee into a visual, with information stored in a SQLite database; multithreading amplified performance efficiency by over 10-fold
  - Revamped Cigna's **Virtual Reality** Meditation app with multiplayer capabilities like avatar selection, hand-tracking, and **cross-device object interaction** with Unity, C#, Meta Avatars SDK, and Oculus Integration SDK. Presented at Cigna's booth at the Fall 2022 Grace Hopper Conference

- **BNSoft**   Seoul, South Korea
  Software Intern   *June 2021 - August 2021*
  - Determined UI/UX features for an application that facilitates building operating systems under the **AUTOSAR** model.
  - Pitched Vue.js Proof of Concepts in biweekly meetings with CEO and CTO, resulting in approval for integration with application to be used in development of Hyundai automobiles

PROJECTS

- **Personal Website**: Innovated a visually immersive **Three.js** website resembling a café to introduce myself and showcase personal projects; employed Blender to personally design, mesh, and render all objects featured. (August 2022 - July 2023)

- **Spotify Notion Integration**: Programmed **Notion Integration** with Flask Backend and SQLite database using the **Spotify API** to authenticate user, generate Notion databases for viewing and sorting tracks in user's playlists and recommendations, and produce new playlists based on different moods(May 2023 - July 2023)

- **Mini-Amazon**: Engineered e-commerce web app using vanilla **Javascript** frontend, **Flask** back-end, and **PostgreSQL** database acessed by SQLAlchemy where registered users could buy and/or sell products according to inventory space, user balance, and product price (September 2022 - October 2022)

- **Proximity**: Led Agile team as Tech Lead for an **Okta-integrated** web app displaying optimal in-person workdays using coworker data. Architected backend connectivity between **DynamoDB** and **Express.js**, and spearheaded API integration with React client. Added functional testing with Microsoft Playwright (May 2022 - August 2022)

- **Market Analysis**: Analyzed daily open/high/low/close/volume stock market data from 100+ NASDAQ companies over past 20 years obtained with Alpha-Vantage and Yahoo Finance API's with **PCA**, **logistic regression**, and **KNN**. Models created using Python, NumPy, SciPy, Pandas, Matplotlib (July 2021 - October 2021)

- **Mindful Garden**: Created website with **React.js** promoting mental health with interactive features for user meditation, mood journaling, mindful breathing, and sleep scheduling. Awarded **Best Hack for promoting Health & Wellness** at HackDuke 2021 (October 2021)