

Chan Park

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EDUCATION

Duke University

Bachelor of Science - Computer Science (AI/ML)

Minors - Economics, Philosophy

Courses: Data Structures and Algorithms, Computer Architecture, Design and Analysis of Algorithms, Database Systems, Discrete Math, Multivariable Calculus, Econometrics, Graduate Data Science, Microeconomics, Probability, Linear Algebra, Artificial Intelligence

Durham, North Carolina

August 2020 - May 2024

GPA: 3.76

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 **Vue.js** feedback form micro-frontend with API endpoints in the backend for frontend (BFF) and enterprise API layers, streamlining the feedback collection process for 16,000+ users
 - Architected **AWS OpenSearch** index to store form data and synthesized it with enterprise API endpoints in **Typescript**, integrating schema validation, pagination, and flexible query-building modules for scalable and accelerated search queries
- **Duke University** Durham, North Carolina
Research Assistant May 2023 - Present
 - Optimized **hyperparameter search** for 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 **Angular.js** fitness app of 20,000 monthly users and created **Cloudwatch** dashboards for real-time AWS instance/database monitoring, reducing annual issues with overloaded EC2s, ELB, and RDS by 60%
 - **Multithreaded** a Python **web scraper** in BeautifulSoup translating the organization hierarchy of Cigna's 70,000 employees into a visual, with information stored in a SQLite database, amplifying 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 (December 2022 - July 2023)
- **Spotify Notion Integration:** Programmed **Notion Integration** with **Flask** backend and **SQLite** database using the **Spotify API** to, upon authentication, generate Notion databases for viewing and sorting tracks in user's playlists and recommendations based on artists, popularity, or Spotify-assigned audio features like danceability, speechiness, etc (August 2022 - July 2023)
- **Mini-Amazon:** Engineered e-commerce web app using vanilla **Javascript** frontend, **Flask** backend, and **PostgreSQL** database accessed by **SQLAlchemy** where registered users could buy and/or sell products according to inventory space, user balance, and product price (September 2022 - December 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.js** client. Added functional testing with Microsoft Playwright (May 2022 - August 2022)
- **Market Analyzer:** 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 in **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)