Hyun Ki Cho

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EDUCATION

University of Pennsylvania, School of Engineering and Applied Science

BSE in Computer and Information Science (Prospective)

Philadelphia, PA Expected graduation May 2024

Relevant Coursework: Calculus II (Multivariable and Vector Calculus), Calculus III (Linear Algebra), Mathematical Foundations of Computer Science, Programming Languages and Techniques, Web 3 Security, Data Structures and Algorithms, Automata/Computation/Complexity, Introduction to Computer Architecture

Online Coursework: Machine Learning by Stanford University (Coursera)

Technical Skills: Java, Python (Pandas, Tensorflow, Pytorch, Matplotlib/Seaborn), Web Frontend (React/Svelte/Vue.js), React Native, Django, Heroku, Node.js, LaTeX, OCaml

EXPERIENCE

Oracle, Oracle Cloud Software Engineering Intern

(May 2022 - August 2022)

- Implemented a cancel-fast feature for instance groups in the deploy pipeline using Java, significantly improving customer experience for 5000+ companies on release
- Wrote unit tests, and integration tests for the cancel-fast feature with a code coverage of $\sim 100\%$
- Wrote a design document for the cancel-fast feature and incorporated feedback from senior developers

InnoDataBridge(Korean IoT Startup), IoT/AI Intern

(August 2021 - October 2021)

- Modified, documented open source IoT solution titled Mobius, meant for region-wide air quality data collection from 1000+ nodes
- Developed a dashboard for data input visualization using Vue.js, Vuetify, MySQL, MQTT, Node.js Express server
- Displayed image classification results, real-time and predicted air quality data using Electron, Vue.js, Buefy, Flask, and Tensorflow via desktop app for a demo at a conference for 30+ IoT startups

Republic of Korea Army(ROKA) Service, Sergeant, Chaplain

(February 2020 - August 2021)

- Gained leadership and conflict resolution skills by leading and teaching 20+ new soldiers
- Prepared and held Sunday service for ~40 soldiers weekly and mentored a soldier for future chaplain duties

PROJECTS

Artz Philly Mobile, Penn Spark

(January 2022 - July 2022)

- Contributed 1000+ lines of code to a mobile app for dementia patients using React Native, Django, PostgreSQL, Heroku, Websockets, Threading, meant to be used by 50+ users.
- Lead a team of 4 on the technical side, incorporating feedback from members on various design decisions
- Met with clients to discuss app functionality and receive feedback on app and published to Apple and Google stores

Kaggle Competition (SIIM-ISIC Melanoma Classification), Placed Top 78th Percentile

(Fall 2020)

- Participated in a Kaggle competition classifying benign and malignant Melanoma cells using Pandas, Tensorflow, Keras
- Final submission had an AUC score of 0.8442 (maximum score of 1.00), a 43% increase from my baseline score
- Sped up processing by 62% through Kaggle's TPU hardware accelerators and created a data pipeline for TPU usage

Kaggle Competition (2020 Kaggle Machine Learning & Data Science Survey), Bronze-rated

(Winter 2021)

Analyzed trends in 3000+ users in a Kaggle competition about data storytelling with Pandas, Matplotlib, Seaborn

ACTIVITIES/LEADERSHIP

Penn Spark, Member, Blue Instructor

(January 2022 - Present)

- Lead a team on the technical aspect of creating a mobile app for dementia patients, meant to be used by about 50 users
- Developing a curriculum to teach 20+ novice developers about web development

Penn Climate Ventures, Member of Fellowships Team

(Fall 2022 - Present)

• Will be working on securing fellowships with climate startups and organizations for club events

Korean Christians At Penn, Co-Leader

(Fall 2022 - Present)

Co-led and produced material for weekly Bible studies, while organizing social meetings to create community