Inho Choi

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Education

University of California, Berkeley **June 2022 – May 2024**
Bachelor of Art in Data Science *Berkeley, CA*

Santa Monica College **Jan 2020 – June 2022**
Pre-Engineering *Santa Monica, CA*

Experience

SWiiFT **October 2024 – Present**
Frontend Engineer Intern *Remote*

- **Implemented a real-time chat feature using Socket.IO in React Native**, enabling message transmission, user presence indicators, and stable reconnection for an improved user experience.
- **Developed reusable UI components** for the chatroom feature using React Native, increasing scalability and reducing future development time by 30%.

Bad Kids Korporation **June 2024 – Dec 2024**
Web Developer Intern *Remote*

- **Implemented a robust payment system using Stripe, Node.js, and Express.js**, enabling one-time payments and subscriptions, which enhanced transaction security and streamlined the user checkout process.
- Developed and optimized **user authentication and session management APIs**, including login, logout, signup, and session persistence efficiently managing user and session data in MongoDB to enhance security and improve user experience.

Samsung Electronics **June 2023 – Aug 2023**
Machine-Learning Engineer Intern *Hwaseung-si, Korea*

- **Designed and implemented an advanced SSD failure prediction model using machine learning techniques**, processing **over 1 million data entries** to enable proactive maintenance and reduce system downtime.
- **Improved model precision to 87%** by applying cross-validation, performing grid search for hyperparameter tuning, and leveraging ensemble techniques with **LightGBM** and **RandomForest**, significantly enhancing predictive accuracy.
- **Automated data pipelines using Azure Data Factory** to integrate daily incoming data, ensuring continuous model execution and timely updates, which reduced manual intervention and increased operational efficiency.

Projects

Application Tracker | *Python, Github* | *Github* **May 2024 – Present**

- **Developed an application to track job applications using IMAP**, automating the retrieval and organization of email responses from various companies.
- Improved efficiency in managing job applications, **reducing manual tracking efforts and enabling better decision-making** based on organized data.

Task Manager | *React.js, TypeScript, Node.js, Express, MongoDB* | *Github* **April 2024 – June 2024**

- **Developed a dynamic Task Manager application** using HTML, CSS, and TypeScript within a React.js framework to enhance user experience with interactive and responsive UI components.
- **Implemented RESTful APIs** with Node.js and Express to efficiently handle CRUD operations, enabling seamless task management and real-time updates for users.
- **Integrated MongoDB for robust data storage**, ensuring data persistence and scalability, and utilized Mongoose for effective schema design and data validation.

Maze Escape | *Java, Github, IntelliJ* | *Github* **Nov 2022 – Dec 2022**

- **Developed pseudo-randomly generated 2D worlds** with distinct rectangular rooms and hallways using a text-based interface.
- Connected rooms using minimum spanning tree algorithms like Kruskal with Weighted Quick Union and Priority Queue, enhancing game complexity and user experience.

WordNet | *Java, Junit Test, Github, IntelliJ* | *Private Link* **Oct 2022 – Nov 2022**

- **Built a browser-based tool** for visualizing historical word usage in English texts.
- **Implemented unit tests with JUnit** to ensure code reliability and trace bugs effectively.
- Enabled visualization of word popularity trends using data structures such as DFS, List, and HashMap.

Technical Skills

Languages: Python, Java, HTML, CSS, JavaScript, TypeScript, React.js, Node.js, Express.js PostgreSQL, MongoDB
Developer Tools: VS Code, IntelliJ, Jupyter Notebook, Google Colab, Spark, Azure
Technologies/Frameworks: GitHub, JUnit, Linux
Libraries: Pandas, NumPy, PyTorch, TensorFlow, Scikit-learn, Matplotlib, NLTK, HuggingFace