Hosoo(Michael) Lee

Salt Lake City, UT | 385 210-7625

michaelhlee00@gmail.com | linkedin.com/in/hosoo | github.com/DazzlerByte

EDUCATION

Bachelor of Science: Computer Science | Minor: Fintech University of Utah, John & Marcia Price College of Engineering

Salt Lake City, UT Anticipated *May 2025*

Related Coursework

Algorithms, Computer systems, Computer Organization, Machine Learning, Deep Learning, Cybersecurity

TECHNICAL SKILLS

Programming Languages: Python, MATLAB, C#, C++, Java **Technical Skills:** Github, SQL, Pandas, Pytorch, Scikit-Learn, Tensorflow, API

TECHNICAL PROJECTS

EchoGlass Smart Mirror Development – *Python, ChatGPT API, Electron, Raspberry Pi - page* Aug 2024 – May 2025

- Developed a smart mirror system that provides personalized updates (weather, calendar, news, etc.) through both voice commands and touchscreen interaction, enhancing daily morning routines.
- Integrated OpenAl's ChatGPT API for natural language conversations and implemented secure user authentication via Google and Microsoft APIs.
- Designed and built a custom infrared (IR) touch frame to enable full-screen interactive display functionality.
- Engineered a secure, modular system architecture with token-based communication between frontend, backend, and hardware sensors to ensure scalability and data protection.

Handwriting Recognition Using Deep Learning – Python, PyTorch

- Built a convolutional neural network (CNN) trained on 400,000+ handwritten name images, achieving 85.3% validation accuracy through iterative tuning and evaluation.
- Applied data preprocessing techniques such as augmentation, resizing, and normalization to improve model robustness against noise and variation.
- Analyzed misclassifications and explored performance enhancements using ensemble methods and transformerbased architectures.

EXPERIENCE

University of Utah

Research Assistant

- Conducted research on autonomous aerial systems and drone communication protocols.
- Operated Crazyflie 2.0 drones using Python for multi-drone flight control.
- Simulated drone behavior with Utah aerial maps and worked with Prof. Thomas Henderson.
- Helped develop AI-driven coordination strategies to enable safe and efficient drone swarming.

Eden T&S

Intern

- Built a landing <u>page</u> to support RPA marketing campaigns and increase user engagement.
- Explored RPA tools such as UIPATH and Worktornics to create custom automation solutions for internal workflow demos.
- Conducted in-depth research on RPA adoption across South Korea's top 20 financial institutions, identifying key use cases, challenges, and adoption drivers within the capital market sector.
- Gained hands-on RPA coding experience and automated routine business processes.

Orem, UT Aug 2023 – Mar 2024

Seoul, South Korea

Jun 2022 – Aug 2022

Aug 2024 – Dec 2024