# Hein Htut Zaw

Seoul, South Korea | 010-5855-6697 | Mail | LinkedIn | GitHub | Portfolio

### **EDUCATION AND WORK EXPERIENCE**

### The State University of New York, Korea - Stony Brook NY

BSc in Computer Science (Specialization: Data Science & Artificial Intelligence) Graduation: August 2025 GPA: 3.88/4.00, Summa Cum Laude, BSMS Accelerated Program

### **Software Engineer Intern - SPOit**

August 2025 - Jan 2026

- Developed new features for the *KIX mobile camera app*, taking full ownership across *backend (Flask)*, *frontend (Expo React Native)*, *database (Supabase)* layers, testing and deployment
- Published the app on both *iOS* and *Android*, integrating *CI/CD pipelines* and *Docker-based deployments* and used *Google Cloud Platform* for transcoding, storing videos and hosting the server
- Improved the **computer vision pipeline** for football match footage, enhancing *object detection*, *player team classification*, *object tracking*, and *3D-to-2D field coordinate projection* by 30%

## **Undergraduate Research Assistant - SUNY Korea**

Feb 2025 - Aug 2025

- Implemented camera calibration using single-image depth estimation with NuScenes and KITTI datasets
- Utilized state-of-the-art depth estimation models, such as ML-Depth Pro and Depth-Anything, with LiDAR data and Iterative Closest Point (ICP) to find novel approach of camera calibration

### **SKILLS AND CERTIFICATIONS**

Programming Languages: Python, C, Cpp, Java, JavaScript, SQL

Frameworks/Tools: Tableau, Django, Flask, GCP, AWS, Scikit-learn, TensorFlow, Pandas, Pytorch, Numpy, Matplotlib,

Seaborn, Git, UML, HTML, CSS, React, Expo, Express, MongoDB, Linux

Certifications: Machine Learning Specialization (January 2024)

#### **PROJECTS**

## StackOverflow Clone | SQL, MongoDB, React, NextJS

May 2024

- Developed a StackOverflow clone using, implementing user authentication, voting, and comment features
- Integrated CI/CD pipelines for seamless deployment and stable database management
- Designed SQL queries and used MongoDB for database management, React and NextJS for frontend and backend, and Jest for unit testing

# Statistical Data Analysis Of NYC Taxi Trip Data | Python, Numpy

April 2024

- Executed exploratory data analysis on a 2-month taxi fare dataset, and applied interpolation techniques to fill gaps
- Implemented Wald, T, Z, Kolmogorov–Smirnov, Permutation, Chi-Squared, and Bayesian tests from scratch
- Developed multiple linear regression predictive model and conducted feature engineering

### Cognizant Artificial Intelligence Job Simulation on Forage | Python, Numpy, Tensorflow

February 2024

- Conducted exploratory data analysis of a 7-day sensor and sales dataset for one of Cognizant's technology-led clients, Gala Groceries, and extracted insights for efficient stocking and management of supermarket systems
- Designed Data Modeling and presented the workflow to the Data Science Leader
- Prepared multiple linear regression with scikit-learn and TensorFlow, and outputted the performance metrics

### Robotic Arm | Python, Cpp, Robot Operating System(ROS), Arduino

March 2021 - June 2021

- Designed and built a 6 Degrees Of Freedom (DOF) robotic arm with grabber arm mechanism
- Implemented real-time inverse kinematics using rviz2, gazebo, moveIt package in ROS, and Arduino IDE
- Enhanced functionality and precision of the robotic arm using Proportional-Integrative-Derivative control (PID)

#### LEADERSHIP EXPERIENCE

### SUNY Korea International Students Association, Vice President

January 2023 - June 2023

• Collaborated with diverse executive board members to execute cultural events, workshops, and seminars, fostering cross-cultural understanding among a community of 108 international students

References available upon request