Clement Ou

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Professional Summary

- Junior at Carnegie Mellon University majoring in Machine Learning and Statistics, seeking a challenging software engineering internship. Skilled in full-stack development and keen to apply my analytical skills in a practical setting.

Education

- **Carnegie Mellon University** — Pittsburgh, PA
  Bachelor of Science in Statistics and Machine Learning — *May 2025*
  - **Relevant Coursework:** Algorithms and Advanced Data Structures, Computer Systems, Machine Learning, Artificial Intelligence and Representation, Probability and Statistics, Statistical Computing, Statistical Graphics
  - **Activities:** Society of Asian Scientists and Engineers, Students Using Data for Social Good

Experience

- **Jabil Inc.** — San Jose, CA
  Test Engineer — *Sep. 2022 – Apr. 2023*
  - Spearheaded projects for several tech companies, overseeing multiple projects from prototyping to launch
  - Facilitated seamless communication of issues and solutions between manufacturing and overseas engineering.
  - Pioneered implementation of cutting-edge test line monitoring software, streamlining operations by integrating logging, failure analysis, and reporting into a unified tool, reducing errors by 20%
  - Managed a test site and supervised a team of three operators, overseeing all testing, debugging, and resolution of customer-related failures.

Projects

- **Emotion Detector:** Collaborated with a team to develop a deep learning-based emotion detector web application that differentiates between 6 human emotions with an accuracy of 70%.
  - Employed the YOLO neural net, custom-trained for the specific dataset, to achieve desired model performance.
  - Collected over 50,000 images with OpenCV and Bing API, laying the groundwork for an expansive dataset.
  - Developed and streamlined data labeling and categorization infrastructure with OpenCV and custom scripts, enhancing annotation efficiency and consistency, and leveraged AWS EC2 for robust cloud-based model training.
  - Deployed application via the Django framework, optimized for scalability and user accessibility.

- **IoT Door Lock:** Designed and implemented an IoT Door Lock system paired with a dedicated Android app.
  - Fabricated lock and designed housing for device.
  - Executed precise soldering of lock servo and Raspberry Pi, connected to a 9V battery through a breadboard.
  - Engineered an Android App with an intuitive UI, biometric authentication, and cloud connectivity.

- **Home Linux Server:** Configured and optimized an Ubuntu server.
  - Hosted applications such as Nginx, Bitwarden, and Plex for personal and family use.
  - Explored web servers, networking, and containers while crafting automation scripts for optimization.

Technical Skills

- **Languages**: R, Python, C/C++, Java, Javascript, HTML/CSS, SQL

- **Developer Tools**: Linux, Nginx, Git, Docker, GCP, AWS, PyTorch, Matplotlib, ggplot2