

CLEMENT OU

650-942-4296 | clement.h.ou@gmail.com | [linkedin.com/in/clementou](https://www.linkedin.com/in/clementou) | github.com/clementou | Palo Alto, CA

EDUCATION

- **Carnegie Mellon University** Pittsburgh, PA
Bachelor of Science in Statistics and Machine Learning, Minor in Artificial Intelligence May 2025
 - **Relevant Coursework:** Algorithms & Advanced Data Structures, Computer Systems, Distributed Systems, Machine Learning with Large Datasets, Deep Learning, Deep Reinforcement Learning, Probability and Inference, Regression, Statistical Visualizations, Software Engineering, Web Development, Privacy Engineering
 - **Activities:** Students Using Data for Social Good (Project Chair), CMU Data Science Club (Competitions Director)
 - **Awards:** Dean's List (High Honors)

EXPERIENCE

- **Jabil** San Jose, CA
Software Engineer Sep. 2022 - Apr. 2023
 - Engineered a Python-based test line monitoring software, reducing test-related errors by 20% through advanced logging and failure analysis techniques.
 - Spearheaded drone camera system and display technology testing projects using C++ and Python, enhancing product reliability and compliance with industry standards.
 - Managed and supervised a test site team, ensuring efficient testing, debugging, and failure resolution processes. Utilized Agile methodologies for project management.
 - Introduced new test frameworks and automated scripts in Python and Shell, improving testing efficiency and accuracy in failure diagnostics.

PROJECTS

- **Emotion Detector:** Developed a deep learning-based emotion detector web application using Python, TensorFlow, and OpenCV.
 - Fine-tuned the YOLO neural network, achieving 70% accuracy in differentiating six human emotions.
 - Compiled a dataset of 50,000 images, leveraged for model training using Python and OpenCV.
 - Streamlined data annotation and leveraged AWS EC2, optimizing cloud-based training and deployment.
 - Implemented the application via Django, ensuring scalability and user accessibility.
- **Home Linux Server:** Built a versatile Ubuntu server for personal and family use.
 - Managed key services like Bitwarden and Plex, demonstrating server management skills. Used Docker for containerization.
 - Authored scripts for efficient video transcoding, reducing storage use by 60% without compromising quality. Utilized Bash scripting and FFmpeg.
 - Ensured server uptime and security, highlighting expertise in server maintenance and containerization.
- **Animal Foods:** Created 'Animal Foods', a social web application using PHP, Apache, SQL, and Python.
 - Implemented core functionalities like user interaction and post creation with PHP and SQL.
 - Honed a recommendation system combining TF-IDF and SVD matrix factorization, enhancing user experience.
 - Utilized generative AI to simulate user interactions, refining the recommendation algorithm.

TECHNICAL SKILLS

- **Languages:** Python, C/C++, Java, R, Javascript, HTML/CSS, SQL
- **Developer Tools:** GCP, AWS, Pytorch, TensorFlow, Spark, Linux, Docker, Git