TeHsin, Chen

Phone: +886-910457832 | Email: tehsinchen1112@gmail.com
LinkedIn: linkedin.com/in/tehsinchen | Work Portfolio: tehsinchen.github.io/portfolio

Professional Summary

Highly motivated and collaborative Software Engineer with 5+ years of experience in signal analysis. Expertise includes deep learning for fully automated systems, machine learning for human activity recognition on smartwatches, and DevOps with cloud platforms.

Work Experience

Cyweemotion Group
Senior Software Engineer
Jan 2024 – Present

- Team management with the manager includes hiring, mentoring, and cross-functional communication.
- Designed and implemented comprehensive Continuous Integration (CI) processes using GitLab and AWS.
- Led and managed a key solution development project with over 10 team members, focusing on code reviews, problem-solving, and technical guidance.

Cyweemotion Group
Software Engineer
Jul 2021 – Dec 2023

- Led a team of 6 engineers to provide internal cloud solutions using AWS.
- Developed hand-gesture detection algorithms for smartwatches, including finger rubbing and clenching detection.
- Implemented various human activity recognition models for smartwatch.
- Integrated sensor fusion techniques with the Unscented Kalman Filter (UKF) using accelerometer and gyroscope data.

Academia Sinica
Research Assistant
Sep 2019 – Jul 2021

- Co-developed the Phantom SDK for Python in collaboration with Vision Research Inc.
- Developed a fully automated system for image segmentation and classification using deep learning techniques.
- Applied signal analysis and image processing on video to reveal the signal of 5nm nano-particles.
- Built an advanced optical system to study gold nanoparticles as small as 5nm using high-resolution cameras.

Education

National Cheng Kung University
Master of Science (MS), Physics
2016 – 2018

- GPA: 4.11 / 4.3
- Honors: Inducted into The Phi Tau Phi Scholastic Honor Society.
- Focused on precision measurement and theoretical modeling.

Skills

- **Programming Languages**: C/C++, Python
- **Expertise**: Signal Analysis, Algorithm Architecture, Machine Learning, DevOps/ MLOps
- **Platforms**: AWS, Docker, GitLab CI
- **Physics**: Modeling, Optics

Certifications

- AWS Certified Cloud Practitioner

Languages

- English: Professional Working Proficiency
- Mandarin: Native or Bilingual Proficiency