

# JE-RUEI YANG

✉ jerry871002@gmail.com | in linkedin.com/in/jerry871002 | 🌐 github.com/jerry871002 | 📍 Espoo, Finland

## PROFESSIONAL SUMMARY

MSc in Security and Cloud Computing with internships at Ericsson and Siemens EDA. Skilled in backend development, DevOps, and cloud development with Kubernetes. Proficient in Python with experience in C++, JavaScript, and Java. Awarded Erasmus Mundus scholarship for academic excellence. Baseball enthusiast from Taiwan.

## TECHNICAL SKILLS

**Programming Languages:** Python, C++, JavaScript, Java, C, Bash, Go

**Web Development:** Django, Flask, Node.js, Express.js, React

**Cloud Technologies and Platforms:** Docker, Kubernetes, Helm, Kustomize, RabbitMQ, gRPC; Google Cloud, Azure

**DevOps and GitOps:** GitHub Actions, GitLab CI/CD, Jenkins, Flux, Ansible, Terraform, Robot Framework

## EDUCATION

### Aalto University School of Science

Sep 2022 – Jul 2024

Master of Science in Security and Cloud Computing (SECCLO)

Espoo, Finland

- Awarded Erasmus Mundus scholarship (26 awardees from 735 applicants)
- Overall GPA: 5 / 5

### EURECOM

Sep 2023 – Oct 2024

Master of Science in Security and Cloud Computing (SECCLO)

Sophia Antipolis, France

- Second year of the SECCLO program, specialized in Big Data Security
- Awarded the best student of the fall 2023 semester

### National Yang Ming Chiao Tung University (NYCU)

Sep 2017 – Jun 2021

Bachelor of Science in Electrical and Computer Engineering

Hsinchu, Taiwan

- Cross-Disciplinary Specialty in **Computer Science**
- Overall GPA: 4.19 / 4.3; Overall Ranking: 4<sup>th</sup> / 46

## WORK EXPERIENCE

### Thesis Student

Mar 2024 – Sep 2024

Ericsson

Jorvas, Finland

- Research on the thesis titled “Automating Security Operations in Telecommunication Networks Using GitOps.”

### Developer Intern

Mar 2023 – Aug 2023

Ericsson

Jorvas, Finland

- Designed and implemented the initial PKI system test cases in Ericsson Security Manager (a cloud-native Kubernetes-based cybersecurity platform for 5G networks) using Robot framework.
- Refactored legacy Shell scripts and cURL calls into maintainable Python scripts to manage Kubernetes resources.

### Software R&D Intern

May 2022 – Aug 2022

Siemens EDA

Hsinchu, Taiwan

- **Auto Run PERC:** Automated Programmable Electrical Rules Checking (PERC) job submission and machine requests from the high-performance computing (HPC) cluster using Python.
- **PERC Restart Flow:** Saved up to 80% of memory in PERC jobs through AI-predicted memory usage in conjunction with dynamic resource allocation on the HPC cluster.

### Full Stack Developer Intern

Jan 2021 – Nov 2021

Ruei-Yun New Tech Ltd.

Taichung, Taiwan

- **Karate Scoreboard System:** Built a scoreboard and competition schedule management system using Django and Docker Compose. Established a full-duplex communication system using WebSocket to synchronize various clients.
- **Taekwondo Scoreboard System:** Automated third-party applications using pywinauto and integrated them with our system using MQTT and RESTful API. Built database layer using PostgreSQL with JSON fields.

## PROJECTS

**BSI-PT** 📄 | Reinforcement Learning, Python, NumPy, pandas, GitHub Action, Docker

Apr 2022 – Aug 2023

- Official implementation of the experiments in the paper *Opponent Exploitation Based on Bayesian Strategy Inference and Policy Tracking* published in *IEEE Transactions on Games*.
- Developed CI/CD pipelines to automate end-to-end testing and documentation deployment using GitHub Actions.

**PyBitShred** 📄 | Python, multiprocessing

Oct 2023 – Feb 2024

- Python reimplement of BitShred, a large-scale malware similarity analysis and clustering tool.
- Improved performance by 60% compared to the C implementation using multiprocessing, developed two new modes to analyze malware samples.