Yu-Po Peng

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Education

MS	**National Cheng Kung University**, Computer Science and Information Engineering	Sep. 2022 - Sep. 2024

- **Courses:** Linux Kernel Implementation, Computer Architecture
- **Skills:** NLP, Knowledge Graph, Neo4j

BS	**National Sun Yat-sen University**, Computer Science and Engineering	Sep. 2018 - Jun. 2022

- **Courses:** Digital Image Processing, Deep Learning, Network Applications Programming
- **Skills:** Attribute-Based Encryption, Web Development

Publications and Preprints

[1] *Yu-Po Peng*, Chung-Ping Young, Wen-Hsiang Lu, "**Design and Implementation of a Reasoning Question Answering System for Automatically Generating Implicit Questions Based on News Topics**," *Master's Thesis, National Cheng Kung University*, 2024. 🖥📄

[2] *Yu-Po Peng*, Pin-Chung Chen, Kuan-Yu Ko, Jun-Huei Wang, Shin-Nan Guo, Chun-I Fan, "**Secure Extended Mail System Based on Attribute-Based Encryption**," *Cryptology and Information Security Conference*, 2022. 📄

Honors

2023	**Judges' Recognition Award**, AI Voice-Assisted Exhibition Experience for Visually Impaired, AI-GOOD Talent Competition	🌐
2022	**Best Student Paper Award (Honorable Mention)**, 32nd Cryptology and Information Security Conference, Chinese Cryptology and Information Security Association	🌐
2021	**Provision Information Security Award**, College of Engineering Joint Project Competition, National Sun Yat-sen University	🌐

Projects

Medical QA Assistant ○	Lead Developer	Aug. 2024 - Sep. 2024

- Implemented Retrieval-Augmented Generation (RAG) using Large Language Models (LLMs) to **enhance response accuracy and responsibility**, avoiding user misguidance.
- Ollama, Streamlit, LangChain, Chroma

J-kumo (TW) Support System for Japanese Learning 🖥	Primary Maintainer	Feb. 2023 - Apr. 2024

- Repaired and integrated six subsystems using Django.
- Streamlined deployment with shell scripts and Docker Compose
- **Accumulating 70,000+ visits since its launch in September 2023**
- Django, SQL, Nginx, Docker

Course Projects

Linux Kernel Project - fibdrv 🌐○	Spring, 2023

- Developed a Linux kernel module for Fibonacci sequence calculation, optimizing performance through API analysis.
- C/C++, Linux Kernel

Online Chat Service 🔗   Spring, 2022

- Built a simple chatroom supporting multiple users simultaneously using Sockets and Multi-process programming.
- C/C++, Socket Programming