WEI-HAN (BRIAN) WANG

Taiwan brianw0924@gmail.com +886 956806608 brianw0924 brianw0924

Education

M.S. in Computer Science, *National Taiwan University* Sep 2021 – present
- Network Database Lab, Advisor: Prof. Ming-Syan Chen
- GPA: 4.21
- Research: Deep Learning; Deepfake Detection

B.S. in Chemical Engineering, *National Taiwan University* Sep 2017 – Jul 2021
- GPA: 3.99

Skills

Python *(PyTorch, FastAPI)* | **C++** | **Golang** *(Gin)* | **Rust** | **JavaScript** *(React, Node.js)*

Database *(MySQL, PostgreSQL, MongDB, GraphQL, SQLite)* | **Others** *(Git, Linux, Jira, Docker)*

Work Experience

Software Engineer Intern, *Yahoo! - Search team* Jul 2022 – Aug 2022
- Developed recommendation algorithm for tourist attraction based on article.
- Built RESTful APIs for recommendation service.
- Skills & Tools: *Python, NLP, FastAPI, OpenStack*

Software Engineer Intern, *Nexuni - Robot team* Mar 2022 – Jun 2022
- Built full-stack system and integrated deep learning model for security robots.
- Implemented algorithms for object tracking, robots road crossing, people flow counting.
- Skills & Tools: *Python, PyTorch, Docker, Postman, PostgreSQL*

Algorithm Developer Intern, *Neurobit Technologies* Sep 2021 – Jan 2022
- Conducted Research and Development on Near-eye Gaze Estimation, replacing their former model and improving the model in real-world data with custom data augmentation. Reduce 80% in errors.
- Data labeling and automation. Reduce work time by 70%
- Skills & Tools: *Python, PyTorch*

Projects

Linux system software design Mar 2022 – May 2022
- Implemented rootkit, a malicious LKM supporting hide/unhide LKM, masquerading process name, and hook/unhook system call
- Implemented page table hacking by adding system call to expose target process' page table and remmaped it to malicious process' userspace, allowing attackers to do code injection and virtual address space inspection.
- Skills & Tools: *C, Linux*

Skull fracture detection Jan 2022 – Feb 2022
- Implemented a object detection and classification deep learning model to identify skull fracture and localize the fracture region.
- Achieve 89% accuracy in case-level; 0.65 in F1 score.
- Skills & Tools: *Python, PyTorch*

NTU Food Bank Jan 2022 – Feb 2022
- Built a website for people giving away or taking excess foods and drinks.
- Skills & Tools: *React, GraphQL, MongoDB, Heroku*

Awards

Deep Learning for Computer Vision final challenge: Skull fracture detection, 2022
Deep01
Rank 4 / 12

Academic Year Presidential Award, *National Taiwan University* 2019
Rank 5 / 110, GPA 4.23