

Pongpatapee (Dan) Peerapatanapokin

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Education

West Lafayette, IN	Purdue University	Aug 2019 – May 2023
<ul style="list-style-type: none">• Major: B.S. in Computer Engineering, (GPA: 3.83 / 4.0)• Semester Honors – (6/6) Semesters Dean's List – (6/6) Semesters• Relevant Courses: Advance Software Engineering, Data Structure, OOP C++, Digital Sys Design		

Skills

- **Languages:** Python, JavaScript, HTML/CSS, SQL, C, C++
- **Frameworks:** FastAPI, Flask, Pytest, NodeJS, Express, ReactJS, Tailwind, TensorFlow, SKLearn, SQLAlchemy
- **Tech:** Git, GCP, CI/CD, Postman, Docker, Linux, Vim, Firestore, MongoDB, Snowflake, Prefect

Employment

Software Engineer, Intern (Backend)	Interos Inc.	Jun 2022 – Aug 2022
<ul style="list-style-type: none">• Worked in a Scrum team to improve and maintain Backend & API infrastructure• Addressed regular production bugs in the Backend (Python - FastAPI, DB - Snowflake) using Jira/Kanban• Fixed broken filter in table view and inconsistent values between the map and table view for production• Fixed and improve Postman tests in CI pipeline by optimizing docker commands to run directly from the image• Allow for future bulk CSV exports by refactoring/combining Prefect Flow tasks.		

Cam2/Google - TensorFlow Model Garden

Undergraduate Researcher	(Purdue University)	Jan 2022 – Present
<ul style="list-style-type: none">• Collaborating with Google to develop and reproduce exemplar implementation of cutting-edge ML models and algorithms to contribute to the TensorFlow Model Garden• Addressing reproducibility issues in ML by contributing to the TensorFlow Model Garden to act as the standard library for future engineers to use and extend existing models• Reimplementing the YOLOX computer vision model from the original paper in TensorFlow		

Undergraduate TA	Purdue University	Jan 2022 – May 2022
<ul style="list-style-type: none">• Assisted a class of ~300 students with Data Science and Python concepts such as Data Visualization, Hypothesis testing, Regressions, Clustering, Classification, Training and Testing datasets, Regex, etc.• Using Python libraries such as SKLearn, Numpy, Pandas, Scipy, and Matplotlib		

National Science and Technology

Software Engineer, Intern (Data/ML)	Development Agency	Jun 2021 – Aug 2021
<ul style="list-style-type: none">• Researched COVID trends and detection methods with Electronic Noses• Collected and Compiled 4 scent datasets with an Electronic Nose• Visualized, analyzed, and trained KNN and Logistic regression ML models via Pandas, Seaborn, and SKLearn to classify scents from datasets with over 90% accuracy• Simplified analysis and training process by developing a GUI using Tkinter in Python		

Undergraduate Researcher	Purdue University	Jan 2020 – May 2020
<ul style="list-style-type: none">• Lead android app developer for the Optical Character Recognition (OCR) application• Improved OCR accuracy by ~15% by using Image pre-processing techniques with different convolution filters such as Edge Detection, Edge Enhancement, De-skewing, and Thresholding		

Projects

Trustworthy Module Registry (ECE 461 – Software Engineering)

- Designed and developed an automatic grading system for NPM modules to characterize their trustworthiness in Python
- Developed and deployed authenticated REST API in Flask to GCP, for users to interact with the “Trustworthy Module Registry”
- Developed a Pytest test suite consisting of Coverage, Unit, and End-to-end tests
- Sped up development by ~30% by automating tests and deployment using GitHub Actions for CI/CD

Litter Detection AI (EcoMake Hackathon 3rd Place)

- Develop a camera litter detection system that maps the location of detected litter around the Purdue campus
- Utilized Azure Computer Vision AI to detect litter by sending images from a Raspberry Pi
- Visualized litter coordinates on a website with Google's Geolocation API and a React front-end