Phuykong Meng

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EDUCATION

Temple University

Philadelphia, PA

Bachelor of Science in Computer Science | GPA: 3.87

Aug. 2021 - May 2025

PUBLICATION

B. Thai, S. McNicholas, S. S. Shalamzari, **P. Meng** and J. Picone, "Towards a More Extensible Machine Learning Demonstration Tool," 2023 IEEE Signal Processing in Medicine and Biology Symposium (SPMB), Philadelphia, PA, USA, 2023, pp. 1-5, doi: 10.1109/SPMB59478.2023.10372731.

Experience

Strados Labs

June 2024 – Present

Software Developer Intern | AWS, Python, Javascript

Philadelphia, PA

- Spearheaded EDA to assess voice detection model performance on speech datasets for speech scrambling. Identified key factors influencing model performance and gained valuable insights into ML model exploration.
- Incorperated a Transformer-based model (ViTDet) for cough detection using PyTorch, and evaluated the model's performance on an internal dataset, achieving a 80% accuracy rate.

Neural Engineering Data Consortium

August 2021 – May 2024

Software Developer | Python, HTML, CSS, Javascript, Shell

Philadelphia, PA

- Led a team of 3 students in refactoring 2 machine learning systems on EEG seizure detection and digital pathology with weekly standup and code reviews, validating publication results
- Developed 3+ Python data classes for data uniformity, improving code reusability, and advocated for better coding practices and format for new developers
- Developed a Python script that de-identifies 1 petabyte worth of medical images for dataset publications
- Redesigned and recreated the main website using Figma/HTML/CSS, also optimizing user flow and organization

Strados Labs

June 2023 – August 2023

Software Developer Intern | Python, Javascript, AWS

Philadelphia, PA

- Developed and iterated on a web application(HTML/ SCSS/ Javascript/D3.js) that visualizes UMAP data mapping of patient's cough recording to streamline the QA process, decreasing the QA time by 50%
- Added several endpoints to internal API that fetches and upload annotation files with token verification in S3 bucket, increasing efficiency for the QA team

Projects

CodeFest 2024 Hackathon Winner | https://github.com/timo1k/renren

April 2024 – April 2024

- Led a team of four and pitched to multiple judges to secure 3rd place in the beginner category and secure victory in the Comcast sponsored track, triumphing over 63 teams and 450+ competitors, earning a prize of \$1500
- Implemented a React Native application using AWS serverless architecture and Twilio integration, featuring live fire detection and push notification alerts for users, with seamless communication to authorities through the app

Fit-tastic (Owl Hack Spring 2023 Winner) | https://devpost.com/software/fit-tastic | Sept. 2021 - Sept. 2021

- Led the development of a React web app for fitness planning with fluid and user-accessible UI during the hackathon, helping to lower the barrier of entry to healthy eating
- Integrated the OpenAI GPT-3 Chatbot API into the application, enabling natural language interaction and personalized fitness recommendations for users

Technical Skills

Languages: Java, Python, C, SQL, JavaScript, TypeScript, HTML/CSS

Frameworks: React, Node.js, Next

Developer Tools: Git, Figma, Docker, AWS (S3, EC2, ECR), Jira

ACTIVITIES

Treasurer, Temple Trading Club (TTC)

Jan. 2024 – Present

Member, Association for Computing Machinery (ACM)

Sep. 2021 – Present