Prahit Yaugand

Fremont, CA | +1 (669) 291-6175 | yaugand2@illinois.edu | www.linkedin.com/in/prahityaugand | https://github.com/prahity

Education

University of Illinois at Urbana-Champaign (UIUC) Expected Completion: **May 2027**
Bachelor of Science in Computer Science GPA: **4.0/4.0** (Dean's List)
Relevant Coursework: System Programming, Deep Learning for Computer Vision, Data Structures and Algorithms, Database Systems, Computer Architecture, Software Design Lab, Probability and Statistics, Linear Algebra, Numerical Methods, and Object Oriented Programming (*C++, Java*)

Skills

Languages: C++, C, Java, Javascript, Python, Swift, R, STAPL

Tools/Frameworks/Others: REST APIs, Linux, Tensorflow, OpenCV, Numpy, Pandas, PyTorch, CUDA, Thrust, NVIDIA Nsight profiler, GDB, Valgrind, Flask Server, RedisDB, MongoDB, MySQL, ReactJS, NextJS, Git, cPanel, HTML, CSS, Figma

Coursera certifications: Operating Systems by Google, Algorithms by Stanford

Professional Experience

Pulse Tech Conference, UIUC | *President and Prior Technical Staff* Oct 2024 - Present

- Organized and hosted interview career fair prep session with FAST Enterprises LLC for 40+ UIUC students
- Designed & deployed 2025 website for Pulse Tech Conference with 200+ attendees *(Figma, React, cPanel)*
- Planned logistics and coordinated a technical workshop for local high school students

Parasol Lab, UIUC | *Research Intern* May 2025 - Aug 2025

- Expanded STAPL parallel programming C++ library with GPU integration *(C++, Thrust, CUDA, Python*)
- Provided proof-of concept for GPU scaling algorithms in STAPL and studied benefits of user-level caching
- Achieved 10-100x scaling speedups with GPUs by utilizing pinned memory and zero-copy memory transfers

Chemical Imaging Lab, UIUC | *Student Researcher* Sep 2024 - Jan 2025

- Designed GANs to enhance synthetic cancer cell images from low-quality microscopy images *(PyTorch, Python)*
- Explored UNet, Pix2Pix, Pix2PixHD, and VSGD-Net generative adversarial network (GAN) frameworks
- Validated neural network batch jobs on the NCSA HAL cluster environment

Micro Lessons Academy | *Instructor and Founder* Feb 2023 - Present

- Founded a nonprofit and conducted classes for elementary and middle school students on STEM areas
- Mentored student instructors and prepared curriculum for programming and competitive math
- Provided free weekly math sessions encouraging 100+ students across 15 different schools in Bay Area, California

Pioneer Research Academics | *Research Scholar* Jan 2023 - Jul 2023

- Built the end-to-end application from architecture, dataset generation, and model classification
- Implemented a CNN model with computer vision algorithms that identify the spoken word from visual vibrations
- Classified vibrations to spoken words with 97.3% accuracy with 1000 audio file dataset (*Python, OpenCV, Tensorflow*)
- Nominated in the top 10% of 2023 Pioneer research projects

University of California, Santa Barbara | *Student Researcher* Jun 2022 - Jul 2022

- Developed a CNN model to differentiate deep fake images from real ones (*Python, Tensorflow*)
- Utilized various preprocessing techniques like kernel sharpening and discrete cosine transformation
- Achieved accuracy of 98.8% and presented findings at capstone seminar

Projects

Plant Disease Detection Mobile App Feb 2025 - Mar 2025

- Designed an app to obtain plant name, health, location, and potential treatments when given an image of a plant
- Utilized CNN to identify plant health and obtain possible treatments (*Tensorflow, SwiftUI, REST API*)

Skill Builder Full Stack Web Application Dec 2024 - Jan 2025

- Designed a full stack web application with 1000+ flashcards to enhance student vocabulary and math skills
- Integrated React components to Flask server which fetches data from RedisDB *(React JS, Python, REST API, RedisDB)*

Student Loan Default Rate Predictor May 2024 - Jun 2024

- Developed machine learning model to predict student loan default rates with a dataset of 4000+ colleges (Python, *R*)
- Won 1st place in the national data science contest hosted by Skew the Script

Autograder Jan 2024 - June 2024

- Designed and implemented autograder as a computer science TA to collect students' source code from Google Classroom submissions, execute their Java programs and grade the results (*Python*)