Parth Thakre

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EDUCATION

Purdue University - West Lafayette

Aug 2022 – Dec 2025

Bachelor of Science in Computer Science and Data Science

GPA: 3.71

- Coursework: Object-Oriented Programming, Data Structures & Algorithms, Probability, Data Engineering, Computer Architecture, Analysis of Algorithms, Artificial Intelligence, Statistical Theory, Intro to Data Science
- Future Coursework (Spring 2025): Systems Programming, Software Engineering, Data Mining And Machine Learning, Statistical Programming And Data Management

EXPERIENCE

Undergraduate Researcher

Aug 2024 – Present

Purdue University - West Lafayette

West Lafayette, IN

- Processing large IMPROVE datasets in Python from 8 Midwest states, analyzing wildfire impacts over 20+ years
- Writing scripts with pandas for data extraction, cleaning, and in-depth statistical analysis of aerosol compositions
- Automating visualization with Matplotlib, highlighting long-term air quality trends and regional differences

Undergraduate Research Assistant

Aug 2024 – Present

Purdue Vertically Integrated Projects (VIP)

West Lafayette, IN

- Training HRNet/RTMPose models (via OpenMMLab) on AP-10k, and testing models with our Senegal dataset
- Employing transfer learning and training the CNNs on our dataset, and evaluating keypoint detection accuracy
- Labeling keypoints and images to create accurate dataset, and optimizing the models in Python using PyTorch

Software Development Intern

Jul 2024 – Aug 2024

SiTime

Santa Clara, CA

- Developed a PyQt6 software tool for wafer production data analysis, significantly optimizing testing processes
- Achieved a 70 90% reduction in test time, resulting in faster production cycles and cost savings for Test Engineers
- Created a data processing algorithm using pandas in Python, facilitating efficient analysis of large STDF files
- Generated custom insightful visualizations using Matplotlib, transforming complex data into actionable insights

Software Engineeer Intern

Jul 2021 - Aug 2021

Sonic Wall

San Jose, CA

- Implemented JSON/HTML code to streamline data transfer processes for a network security manager
- Conducted 250+ API tests using Postman to ensure system integrity and a better user experience
- Engaged with the Software Engineering Team Lead to optimize data transfer and enhance customer reporting

Projects

Marketplace Messaging App | Java, Thread, Server Sockets, JavaGUI

Apr 2023 – May 2023

- Developed Java GUI server for "Customers"/"Sellers" users to communicate using Swing library
- Implemented Multi threading and Server Sockets enabling concurrent client access utilizing a centralized server
- Effectively increased efficiency of program via using appropriate data structures and algorithms, and File I/O

Uberz | *HTML*, *CSS*, *JavaScript*

Jun 2021 – Aug 2021

- Developed a visually appealing website with HTML, CSS and basic Js, inspired by previous Uber sites
- Successfully Implemented a clean user interface with dynamic resizing, through HTML/CSS & Js

CERTIFICATIONS & AWARDS

Certifications: Machine Learning Specialization, Python for Data Science, AI & Development, Advanced Learning Algorithms, Supervised Machine Learning: Regression & Classification, Unsupervised Learning, Recommenders, Reinforcement Learning, SAP Technology Training, Gen AI Technology Training, Data Analytics Technology Training Awards: OUR Scholars Scholarship, Dean's List, Semester Honors, 1st in Central Coast Section Scholastic Award (Boys Golf - 2022)

TECHNICAL SKILLS

Languages: Java, Python, C/C++, R, HTML/CSS, JavaScript, SQL

Developer Tools: Linux, Git, GitHub, VS Code, PyCharm, IntelliJ, R Studio, Brackets, Sublime

Libraries: numPy, Matplotlib, pandas, scikit-learn, Java Swing, R ggplot, Tensorflow

Productivity Software: Outlook, Word, Excel, PowerPoint