Parth Gupta

+1858-319-6082 | U.S. Citizen | p5gupta@ucsd.edu | <u>LinkedIn</u> | <u>GitHub</u>

EDUCATION

University of California San Diego

B.Sc in Mathematics - Computer Science

San Diego, CA Sep. 2021 – Mar 2025

EXPERIENCE

Software Engineer Intern

Jan 2024 - May 2024

More Seconds | MongoDB, React, TypeScript, Node.js, Express.js, Docker, OpenAI, Python

 $Remote,\ USA$

- Containerized development environment with Docker, ensuring consistency and streamlined deployment.
- Performed data analysis through bar and line charts using Jupyter Notebook for implementing AI
 agent across various dashboards, improving developer task allocation accuracy by 30%.
- Developed **MERN** full-stack features for developer dashboards like displaying mutual followers and billable toggle, optimizing projects and sub-projects management processes by 60%.
- Documented API endpoints and data flows; used **Postman** and **Jest** for validation of edge cases.
- Used Git and Agile methodologies for iterative development and on-time feature delivery.

Tutor

March 2023 – August 2023

Tutor.com

Remote, USA

- Remotely tutored students in Algebra I, Algebra II, and Geometry with tailored instruction.
 - Tutored 500+ high school students, increasing participation by 35% and reducing absenteeism by 25%.
 - Fostered critical thinking and confidence, contributing to increase in 75% homework completion rate.

Full Stack Intern Aug. 2022 – Sep 2022

ThatNeedle.com | JavaScript, Flask, HTML, CSS

Remote, India

- Engineered backend pipelines to process and serve multi-year stock trend data and enabling dynamic sector-wise comparisons via **Chart.js** visualizations, driving a 30% increase in platform engagement.
- Built an interactive geo heat map with **Leaflet and D3.js** to analyze global population disparities, allowing stakeholders to identify high-risk regions for targeted resource allocation.
- Optimized visual layout and color schemes to improve readability and user engagement.

Projects

Credit Card Fraud Detection | Python, NumPy, Pandas, SciKit Learn

- Processed 6M+ transactional records; applied SMOTE to handle imbalance, and engineered features with MinMaxScaler and LabelEncoder.
- Improved classification performance by replacing Logistic Regression with Random Forest, boosting accuracy from 92.4% to 99.9% and F1 score from 6.1 to 88.7.

Business Intelligence Dashboard – E-commerce | Tableau, Excel, Financial Data

- Prepared and transformed multi-segment e-commerce sales data using Power Query, PivotTables, INDEX-MATCH/VLOOKUP, dynamic named ranges, array formulas, conditional formatting, and data validation, ensuring clean, analysis-ready datasets for integration.
- Designed an interactive Tableau dashboard with **KPI cards**, **geospatial heat maps**, **dual-axis charts**, **calculated fields**, **parameter controls**, and **dashboard actions** to deliver insights by segment, region, and manufacturing origin, optimized with data source filters.

TECHNICAL SKILLS

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

Web Development Skills: React Native, React NextJS, Flask, Express.js, Django, React Redux, PyGame, pandas, NumPy, Matplotlib, Scikit-learn, Socket.io, Tableau, NoSQL, MySQL, MongoDB, Supabase, REST APIs Docker, AWS, Heroku, Vercel

Relevant Coursework: Data Structures, Computer Organization, Discrete Mathematics, Data Mining, Numerical Optimization and Linear Algebra

Online Courses: GitLab CI/CD: Pipelines, CI/CD and DevOps for Beginners, Google Data Analytics, Tableau Fundamentals