

# Siddharth Narsipur

585-410-8848 | [snarsipu@u.rochester.edu](mailto:snarsipu@u.rochester.edu) | [sidnarsipur.github.io](https://sidnarsipur.github.io) | [linkedin.com/in/sid-narsipur](https://linkedin.com/in/sid-narsipur) |

## EDUCATION

### University of Rochester

*Bachelor of Science in Computer Science*

Rochester, NY

Aug. 2022 – May 2026

- GPA: 3.8, Dean's List
- Coursework: Operating Systems, Distributed & Parallel Computing, Data Structures & Algorithms, Computer Architecture, Computer Vision, Artificial Intelligence, Programming Languages, Advanced Compilers.
- Activities: Google Developer Student Club, MLH Fellowship Finalist, CSUG Tutor, UR Cricket Club.

## EXPERIENCE

### Software Engineer Intern

*LiquiDonate Inc.*

May 2023 – July 2023

San Francisco, CA

- Developed multiple REST and GraphQL APIs in Go, improving sell & order processing efficiency by 30%.
- Optimized Postgres SQL queries and indexing strategies, improving database query performance by 20%, and managed large-scale data processing in BigQuery for analytics and reporting.
- Built an authentication microservice in Go, automating credential revocation and renewal, reducing delays by 40%.
- Deployed unit tests with the Ginkgo framework, achieving 90% test coverage, and integrated API performance logging with Sentry on Google Cloud.
- Designed an admin dashboard in React to monitor real-time data, tracking 15,000+ concurrent shipping movements.

### Undergraduate Research Assistant

*Rochester Bear Lab*

May 2024 – Present

Rochester, NY

- Created an application for Meta Headsets that automatically adapts user interfaces for different VR/MR environments.
- Implemented a 50 parameter linear programming model in Python that optimally places virtual elements in 3D space.
- Developed a Unity tool using C# and .NET to conduct research studies, enabling subjects to view and interact with multiple (4-6+) virtual rooms simultaneously, improving data collection efficiency by 40%.
- Presented poster and demo at conferences and workshops. Awarded the Schwartz Discover Grant.

### Teaching Assistant

*Hajim School of Engineering*

Jan 2023 – Present

Rochester, NY

- Held office hours for 20+ students to review lectures and guide students with assignments for Data Structures courses.
- Conducted workshops to improve understanding in topics such as Machine Learning and Sorting Algorithms.

## PROJECTS

### 3D PBR (Physically Based Rendering) Material Generation | *Python, PyTorch, CUDA, Bash scripting*

[Github](#)

- Constructed a computer vision pipeline using the ControlNet algorithm with Stable Diffusion models to generate highly photorealistic PBR texture maps from photographs.
- Trained deep learning models on NVIDIA A100 GPUs using CUDA acceleration and the Mat Synth dataset, resulting in a 10% lower error rates through optimized hyperparameter tuning and data preprocessing.

### Group4Good (Built @ HackMIT) | *Python, Flask, React, IRIS Vector DB*

[Github](#)

- Built a platform with Flask and Python to securely analyze group purchase data and match common interests with relevant non-profits based on K-Means clustering and data analytics.
- Leveraged Capital One's Nessie API and InterSystem's IRIS Vector Search to identify and recommend charities based on transaction patterns, attaining 92% user-charity match satisfaction.

### Nearvents (DandyHacks Winner) | *Angular, TypeScript, Ionic, Firebase*

[Github](#)

- Created a full-stack event management app used by 400 college students with real-time feed updates powered by Firestore.
- Implemented a location-based notification feed using Capacitor Geolocation API that increased app engagement by 40%.

## TECHNICAL SKILLS

**Languages:** Java, Python, Go, C, C#, JavaScript, HTML/CSS, TypeScript

**Frameworks:** React, Node.js, Flask, Angular, Ionic, Next.js

**Developer Tools:** Git, Docker, Kubernetes, SQL, Postgres, Vector DB, Firebase, Google Cloud Platform, Agile, Flask