# **ARNIT SINHA**

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#### **EDUCATION**

Clarkson University

Aug 2022 - May 2026

B.S. Electrical and Software Engineering

Potsdam, NY

- Coursework: Object Oriented Programming, Data Structures, Algorithms, Digital Design, Embedded Systems
- Awards: Phalanx Honors (2024), Dean's List (2023, 2024), Ignite Presidential Fellow (2022)

**University of Technology Sydney** 

Jul 2024 - Nov 2024

Fall '24 Study Exchange

Sydney, Australia

City University of Hong Kong

Jan 2025 – May 2025

Spring '25 Study Exchange

Hong Kong, China

#### **EXPERIENCE**

BetterHelp

May 2025 – Present

Software QA Engineer Intern

Mountain View, CA (Remote)

- Designed and executed test plans/cases for web and mobile, boosting defect detection and reliability.
- Automated regression tests with **Selenium/Playwright**, cutting manual testing by 40% and raising coverage.
- Worked with developers and PMs to log bugs, track fixes, and deliver high-quality releases on time.

Cvrve

Aug 2024 – April 2025

Manhattan, NY

- Software Engineer Intern
  - Built a URL redirect service handling 3.6M+ monthly requests using ClickHouse, Express.js, Redis.
  - Integrated AI-based testing to monitor system performance, cutting debugging time by 30%.
  - Developed automated hackathon aggregation platform with Python/BeautifulSoup4, featuring real-time WebSocket notifications.

C Speed

May 2024 – Jul 2024

Software Engineer Intern

Syracuse, NY

- Built radar data site with **Angular/TypeScript**, using **Chart.js/OpenLayers** for 1,200+ daily users.
- Developed cloud-based backends using Django, PostgreSQL, and RabbitMQ, efficiently processing over 250,000 data points per second.
- Integrated **AI-powered tools** for real-time GPS and image analysis in travel router development using ML.NET and UVC cameras.

#### **PROJECTS**

WaterCheck | Python, PyTorch, Next.js, TypeScript, AWS | Calhacks

- Built **PyTorch** anomaly detection for water meters, achieving 90% accuracy during live demo.
- Prototyped serverless system with AWS Lambda and PostgreSQL for scalable meter data processing.
- Automated meter consumption tracking using AI-driven image classification with OpenCV, reducing manual effort.

HeyHoo | Next.js, WebRTC, Hugging Face, Python, OpenCV, FastAPI, Redis, TypeScript | HooHacks

- Built vision assistant enabling real-time camera processing and voice navigation with Next.js/WebRTC.
- Integrated AI speech-to-text with **Hugging Face**, achieving **300ms** latency.
- Developed scalable backend using FastAPI, supporting AI-powered object detection with audio feedback.

Academ.ai | Python, OpenAI, Langchain, Cloud SQL, PyQt6, Docker, JavaScript | HackRPI X

- Engineered LLM-powered scheduler using Google Calendar API, managing 100+ concurrent study plans.
- Created interactive dashboard with **React/Tailwind**, featuring real-time updates and drag-and-drop editing.
- Leveraged **Docker** for cloud-based development and deployment, improving prototyping efficiency.

### TECHNICAL SKILLS

Languages/Frameworks: Python, TypeScript, C++, C#, React.js, Node.js, Express.js, NextJS, Tailwind CSS

Tools: Git, Docker, Postman, Vercel, Linux, AWS, GCP, Azure, Heroku, CI/CD

Databases/Infra: MongoDB, MySQL, PostgreSQL, Redis, Cloud SQL, WebSocket, REST, GraphQL

ML/AI: OpenAI, Langchain, Hugging Face, OpenCV, NLP Testing: Cypress, Playwright, Jest, Postman, Selenium