# 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 end-to-end test strategies for web/mobile, uncovering critical bugs and boosting reliability.
- Automated regression suites with **Selenium/Playwright**, cutting manual testing by 40% and expanding coverage.
- Partnered with engineers/PMs to triage defects, streamline fixes, and ship zero-critical-bug releases on time.

Cvrve Aug 2024 – Apr 2025

Software Engineer Intern

Manhattan, NY

- Engineered a URL redirect platform serving 3.6M+ requests/month with ClickHouse, Express.js, Redis.
- Implemented AI-powered performance monitoring, detecting anomalies and reducing system downtime.
- Built real-time hackathon aggregation engine with Python/BeautifulSoup4, automating event discovery.

C Speed May 2024 – Jul 2024

Software Engineer Intern

Syracuse, NY

- Developed radar visualization dashboard in **Angular/TypeScript**, scaling to 1,200+ daily users with **Chart.js/OpenLayers**.
- Optimized cloud backends (Django, PostgreSQL, RabbitMQ) streaming 250K+ data points/sec with low latency.
- Integrated AI-enhanced GPS + image recognition using **ML.NET + UVC cameras**, powering travel router prototypes.

## **PROJECTS**

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

- Trained anomaly detection model in PyTorch, achieving 90% accuracy on meter data during demo.
- Prototyped scalable data pipeline using AWS Lambda + PostgreSQL, enabling near real-time analytics.
- Automated meter tracking with AI OpenCV classification, cutting manual monitoring effort.

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

- Created vision assistant for visually impaired using Next.js/WebRTC, processing live feeds sub-second.
- Achieved 300ms latency in speech-to-text with Hugging Face, enabling seamless interaction.
- Scaled AI object detection + audio feedback via FastAPI/Redis, supporting real-time navigation.

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

- Built LLM-powered scheduler integrating Google Calendar API, coordinating 100+ concurrent study plans.
- Designed dynamic React/Tailwind dashboard with real-time drag-and-drop task management.
- · Containerized system with Docker, accelerating deployments and collaborative development.

## 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