Arnit Sinha

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Education

Clarkson University May 2026
Bachelor of Science in Electrical and Software Engineering *Potsdam, NY*

- **Relevant Coursework**: Object Oriented Programming, Digital Design, Embedded Systems, UI/UX Design
- **Awards**: Commendable Service: Phalanx Honors (Apr 2024), Dean's List (May 2023, May 2024), Ignite Presidential Fellow (Aug 2022)

Experience

Cvrve Aug 2024 – Present
Software Engineer *Manhattan, NY*

- Built a high-performance URL redirect service handling over **3.6 million requests** per month using **ClickHouse, Express.js, and Redis** for caching.
- Developed a hackathon discovery platform with **1,500+ daily active users**, featuring daily web scraping using **Beautiful Soup 4** to add new events.
- Created a platform to apply to and track job applications attracting over **100,000 unique visitors** seeking internships and entry-level opportunities.

C Speed May 2024 – July 2024
Software Engineering Intern *Syracuse, NY*

- Developed a data visualisation website with **Angular and TypeScript** for real-time radar data visualization, integrating **Chart.js and OpenLayers** to deliver an enhanced experience for over 1,200 daily users.
- Built a scalable backend using **Django, PostgreSQL, and RabbitMQ**, enhancing real-time data management for radar systems and efficiently processing over **250,000 data points per second.**
- Developed a travel router in **C#** by modifying the **OpenWRT binary**, integrating GPS, a UVC Camera, and using **ML.NET** for real-time image analysis and alerts.

Projects

HeyHoo | *React, Tailwind CSS, Hugging Face Transformers, MongoDB, Python* | ***HooHacks 2024***

- Engineered an AI vision assistant for the visually impaired using **React** and **Tailwind CSS**, enabling navigation through hands-free voice commands.
- Integrated **Natural Language Processing** (NLP) with **Hugging Face Transformers** and **Python** for interactive "HeyHoo" voice commands.
- Implemented object recognition algorithms in **Python** using **OpenCV** to help users identify over 5,000 objects in real time.

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

- Utilized **Large Language Models** (LLMs) to generate personalized learning schedules, syncing automatically with Google Calendar for tailored study plans.
- Developed a web server version with **React** and **Tailwind CSS**, providing an intuitive interface for creating and managing learning schedules across devices.
- Created a user-friendly desktop GUI using **PyQt6**, offering an executable version for offline use, with over 50 downloads post-hackathon.

Technical Skills

Languages: Python, TypeScript, JavaScript, C++, C#, Ruby
Web Technologies: HTML5, CSS3, React.js, Angular
Tools and IDEs: Git, Linux, Visual Studio Code, Docker, Postman
Database Tools: MongoDB, MySQL, PostgreSQL
Cloud Platforms: AWS, Google Cloud, Azure, Heroku