Chris Sarli

csarli@brown.edu
chris.sarl

EDUCATION

Brown University

B.S. **Computer Science.** Expected Completion: May 2022.

Coursework includes Privacy-Conscious Systems, Algorithms, Software Security and Exploitation, Distributed Computer Systems, Data Science, Programming Languages, Machine Learning, and Cybersecurity Ethics.

B.A. **Urban Studies,** *with Honors*. Expected Completion: May 2022.

Completing senior honors thesis examining regulatory and technical challenges to effective and equitable Internet access in urban settings.

WORK EXPERIENCE

Linode

Software Engineering Intern · May–December 2021

- Developed the company's Python-based public-facing API, which enables programmatic and graphical interactions with the company's core products.

- Implemented new features, performed codebase-wide refactors, fixed bugs, and managed deployments to a production environment.

- Hired as a full-time intern starting in May 2021 and retained in a part-time capacity (while attending classes) from September through December 2021.

Brown University

Research Assistant · May 2020–May 2021

- Participant in the Urban Transition Historical GIS Project, working to digitize archival street maps and census data.

City of Providence

Data Intern, Office of Sustainability · June-September 2021

- Prepared City of Providence's 2018 Greenhouse Gas Emissions Inventory.

- Streamlined the creation of future emissions inventories by documenting procedures and writing Python scripts to automate data processing.

TECHNICAL PROFICIENCIES AND AREAS OF INTEREST

Programming languages	C, C++, Go, Java, JavaScript/TypeScript, PHP, Python, R, Racket, Scala, Swift.
Software Engineering	Significant experience using Git version control in both small and large projects.
	Familiarity with Docker/containerized applications.
	Experience in an agile work environment and developing with continuous integration pipelines.
Front-end Web Development	HTML, CSS, simple JavaScript.
	Frameworks including Angular, React, and Vue.
	Static site generation.
Back-end Development	API design and implementation with Flask (Python) and Express (JavaScript/Node.js).
	Relational Databases: basic design and use with raw SQL queries and ORMs (mostly SQLAlchemy for Python).
	Experience with basic Linux server administration, webserver configuration, and DNS records.
	Understanding and implementation of decentralized and distributed systems, including the Tapestry Distributed Hash Table and the Raft Consensus Algorithm.
Data Science	Significant experience with common data science packages in Python, including but not limited to NumPy, Pandas, GeoPandas, Matplotlib, Datashader, and HoloViews.
	Limited experience working with R to create Shiny dashboard views.
Areas of Interest	Systems for data processing and release with differential privacy guarantees, broadband and telecommunications policy, geospatial data processing, digital civil liberties, algorithmic bias detection.