Paul Carlson

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Education

Rensselaer Polytechnic Institute   **Aug. 2024 – Present**
Bachelor of Computer Science & Bachelor of Information Technology and Web Science   Troy, NY
GPA: 3.55

Relevant Coursework

- Data Structures
- Matrix Algebra
- Multivariable Calculus
- Intro to Information Technology and Web Science

Experience

East-SouthEast, LLC   **May 2025 – Present**
Web & Geospatial Technology Intern   Chatham, MA
- Overhauled the front-end architecture for 9 town web maps, migrating a legacy system to a dynamic, centralized GitHub Pages repository.
- Reduced universal update deployment time from hours to under 2 minutes, eliminating code redundancy and solving a critical maintenance bottleneck.
- Engineered a suite of advanced features to drive user engagement and create commercial value, including a dynamic legend, viewport bookmarking, and an on-click parcel info tool.
- Developed a custom multi-page printing feature with saveable client profiles and configurable map layers, designing it as a premium tool for a future subscription model.

Sweet Dreams Ice Cream & Candy   **May 2023 – Present**
Team Manager & Sales Associate   Chatham, MA
- Managed daily store operations, including opening/closing procedures and staff oversight.
- Optimized inventory and deliveries to meet customer demand.
- Resolved customer issues and ensured a high-quality service experience.

Projects

Interactive Web Map Modernization | East-SouthEast, LLC Internship
- Architected and built a full-featured, professional-grade web mapping application from a legacy system, serving 9 separate towns from a single, dynamic codebase. Engineered a suite of commercially valuable features including a multi-page custom printing utility.

Munsell Color Mapper | East-SouthEast, LLC Internship
- Architecting a full-stack mobile application using Python and Swift to automate the identification of Munsell soil colors from a photo, designed with offline functionality for remote field use.
- Engineered custom Python algorithms to analyze image RGB values and accurately match them against a database of official soil color codes.

EV Charging Site Analysis | HackRPI 2024
- Developed a Python-based analytical tool during a 24-hour hackathon to identify optimal locations for new EV charging stations based on population density and existing infrastructure data.
- Engineered an interactive map as a proof-of-concept for the "Urban Upgrades" challenge, demonstrating a data-driven approach to improving city infrastructure.

Technical Skills

Languages: Python, JavaScript, Swift, C++, HTML/CSS, TypeScript, PHP
Frameworks & Technologies: Mapbox, MongoDB, Azure, Node.js
Developer & Geospatial Tools: GitHub, QGIS, VS Code, GPS & Total Stations

Leadership / Extracurricular

RPI Ski Club   **Fall 2024 - Present**
Executive Board, Social Media Chair   Fall 2024 – Spring 2025

Fraternity | Phi Gamma Delta (Tau Nu)   **Spring 2025 - Present**
Stewardship & Public Relations Chair   Spring 2025 – Present
- Manage the fraternity's Instagram presence to promote philanthropic events and manage the chapter's household logistics, including meal plan budget and supply procurement.

Eagle Scout | Boy Scouts of America   **Nov. 2023**
- Led a team to build and install three community benches, managing the project from initial design and fundraising to final installation.