

Christopher Bowman

Software Engineer | Located in New London, CT | 508-302-9166 | cbowman.se@gmail.com | [Github](#) | [Portfolio](#) | [LinkedIn](#)

Technical Skills

Languages & Technologies: Python | JavaScript | Java | C | C++ | PHP | SQL | WordPress | Webflow | Figma

Libraries & Frameworks: React.js | Next.js | Express.js | Django | Flask

Databases: PostgreSQL | MySQL | MongoDB

Cloud Services: Amazon Web Services (AWS)

CAD/ FEA Softwares: ABAQUS | Altair Hyperworks | ANSYS | Fluent | SolidWorks | Blender

Professional Work Experience

Software Engineer | Propark Mobility | Contract 10/2023 - Present

- Developing custom **WordPress** Theme and Backend with **PHP**, **MySQL**, Apache, **JavaScript**, HTML and CSS .
- Using Advanced Custom Fields and WordPress Plugins to create a webpage template for Propark Mobility acquisitions.

Academic Tutor | Parliament Tutors | Contract 10/2023 - Present

- Provide tutoring to US Coast Guard Academy cadets in Statics and Mechanics of Materials.
- Provide tutoring to veterans through the US Department of Veterans Affairs in **C Programming**, Statics, Multivariable Calculus, and Physics 2.

Senior Software Engineer | Scott's Landscaping, Inc 2/2023 - Present

scottslandscaping.org | github.com/cbowman422/scottslandscaping

- Built a responsive web application with **React.js** to replace the company's outdated website.
- Improved overall accessibility (**A11y**) (Alt text for images, color contrast, headings and semantic HTML) across devices and increased user retention rate by 15%.
- Designed user experience and user interface (**UX/UI**), resulting in a 30% increase in website engagement and a 20% decrease in bounce rate.
- Managed the transfer of the **domain registrar** and **email hosting** resulting in a 60% decrease in annual hosting cost.
- Developed a responsive hamburger menu, before and after slider component and a modal popup/image slider without the use of npm library packages to improve the integrity of the website.

Software Engineer | NextGen | Contract 8/2023 - 10/2023

- Worked with a team of 6 software engineers to build the company website with **Next.js**, **React.js** and **Tailwind CSS**.
- Helped architect a **Node/Express RESTful API** using **PostgreSQL** as the backing data store.
- Responsible for the implementation of **JSON Web Token (JWT)** and **Bearer Authorization** to fortify website security.

DevOps Engineer | SpaceLab | Internship 6/2023 - 8/2023

spacelab.space/

- Built scalable backend environment utilizing cloud-native functionalities (**AWS EC2** and **AWS Fargate**)
- Led the charge to design the cloud-native deployment system using **AWS Fargate** and **Docker** to achieve scalability while also balancing cost.
- Leveraged ChatGPT to help improve my knowledge in **AWS**, **GraphQL**, and **Docker**.

Engineer II | General Dynamics Electric Boat 8/2020 - 10/2022

- Produced scripts in **Python** to run ABAQUS software for design support of Virginia and Columbia class submarines.
- Conducted research, development, technical consulting, and application of **state-of-the-art computational engineering** analysis methods and software.

- Obtained Secret Level Security Clearance at a Fortune 100 Company.

Education

University of Massachusetts, Amherst | Bachelor of Science in Mechanical Engineering | GPA 3.44 5/2020

- Relevant coursework includes: Computer Science, Electrical Engineering, MATLAB Programming, Calculus 1 & 2, Multivariable Calculus, Differential Equations, Linear Algebra, Engineering Statistics.

General Assembly | Software Engineering Immersive 2/2023

- Focused on product development fundamentals, object-oriented programming, MVC frameworks, data modeling, and team collaboration strategies.
- Mentored students during group work and provided support with debugging code.

Software Development Projects

Bowman Games 9/2023 - Present

Tech Stack: **C++** | Unreal Engine 5 | Blender | Ableton Live 11

- Building a video game using **C++**, Unreal Engine 5, Blender and Ableton Live 11.

Money Mania | github.com/cbowman422/Money-Mania-Frontend 3/2023

Tech Stack: **MongoDB** | **Express** | **React.js** | **Node.js** | **HTML** | **CSS**

- Developed a **MERN** application geared towards student finance education, which placed 1st place in the General Assembly 2023 Gamifying Hackathon.
- Led a team of 3 UX/UI designers and 4 software engineers to accomplish MVP in a 4-day sprint.
- Responsible for the **Node.js**, **Express**, and **MongoDB RESTful** back-end server and rebuilding 3 **React.js** front-end pages.

Messenger | github.com/cbowman422/messenger 2/2023

Tech Stack: **Socket.IO** | **MongoDB** | **Express** | **React.js** | **Node.js** | **HTML** | **CSS**

- Project Lead for a dynamic messaging **MERN** application employing **Socket.IO** for real-time chat room messaging.
- Responsible for integrating a new library, **Socket.IO**, into a **MERN** application with **JWT** and **Bearer Authorization** in order to accomplish MVP in a 1-week sprint.
- Implemented the Fetch method for **JWT** data exchange, a stretch goal includes adding Auth0 to secure and control access to that data.