PARKER VAN HAM | parkervanham@gmail.com | (603) 738-1695

6 Hemlock rd, Bow NH | Portfolio: parkervanham.com | LinkedIn: www.linkedin.com/in/parker-van-ham-8545ab220

EDUCATION

Worcester Polytechnic Institute (WPI) – Worcester, MA Bachelor of Science in Computer Science, 2020-2025 GPA: 3.2 /4.0

TECHNICAL SKILLS

Languages: Java, Python, JavaScript, TypeScript, C, HTML, CSS, SQL

Frameworks/Tools: React, Next.js, Langchain.js, Vercel AI SDK, Node.js, Express, MongoDB, PostgresSQL, AstraDB (Vector), Tailwindcss, Git, Microsoft Office, Oracle, SolidWorks

Concepts: Full-Stack Development, RAG (Retrieval Augmented Generation), Agile/Scrum, Web Development, Database Systems, Object-Oriented Programming

PROJECTS

Personal Portfolio & AI Assistant - Full-Stack Developer / Sole Developer

parkervanham.com 2025

- Designed and developed a modern, full-stack portfolio website from scratch using Next.js, React, Typescript, and Tailwindcss
- Engineered a Retrieval Augmented Generation (RAG) pipeline for an integrated AI chatbot, enabling it to answer questions based on website content.
- Utilized Google Gemini for embeddings and conversational responses, Langchain.js for orchestration, and AstraDB as the vector store for efficient semantic search.
- Deployed the application on Vercel, configuring production environment variables and SEO best practices.
- Z3 Wellness Sleep App Full-Stack Developer

WPI Major Qualifying Project, August 2023 – May 2024

- Collaborated on improving a sleep and wellness tracking web app, continuing work from previous MQP teams.
- Conducted a user study to identify usability issues and inform redesign.
- Developed a new frontend UI, strengthened backend functionality, and implemented improved error handling.
- Reorganized codebase to enhance maintainability and support future development.

- Final report: https://digital.wpi.edu/concern/student_works/2z10wv496?locale=zh

El Parque Redevelopment Project – Panama City, Panama – Data Analyst / Community Researcher Global Projects Program, Fall 2022

- Partnered with Fundación Ciudad del Saber to evaluate and recommend improvements to a public park.
- Conducted and analyzed community surveys and assessed geographical and financial data.
- Delivered a final proposal to local stakeholders, including prioritized infrastructure improvements.
- Final report: https://digital.wpi.edu/concern/student_works/br86b6951?locale=en

JOB EXPERIENCE

Common Man Roadside – Cook, Hooksett, NH
May 2023 – Present
Prepared and managed a variety of dishes in a fast-paced kitchen environment.
Bow Parks and Recreation – Camp Counselor, Bow, NH
May 2022– August 2022
Led daily activities for children ages 5–13, fostering teamwork and communication.
Page's Country Store – Cashier & Deli Worker, Dunbarton, NH
May 2021 – August 2022
Handled point-of-sale transactions and food prep in a customer-facing role.

LEADERSHIP & ACTIVITIES

Sigma Alpha Epsilon Fraternity – Worcester, MA

- Member Educator (Aug 2023 May 2024): Delivered educational modules to members as part of national program.
- Recorder (Aug Dec 2021): Managed internal communications and event calendar.

Clubs: Golf Club, Club Soccer, Spikeball Club