Benjamin Saalberg

Email: bsaalberg@gmail.com | Phone: (734) 545-5768 | Ann Arbor, MI

Education and Certifications

Google UX and UI Design Certification

Google | In Progress

Bachelor of Arts in Computer Science

Kalamazoo College | September '20 - June '24

Relevant Experience

Research Software Engineer II, Michigan Tech Research Institute

Ann Arbor, MI | April '25 - Present

- Architect Python benchmarking systems and PyTest frameworks, improving code reliability for geospatial analysis tools used in conservation and ecology research.
- Design data science workflows translating complex scientific requirements into production-ready applications.
- Optimize software performance by utilizing parallelization techniques to **decrease testing times** by 60x.

Associate Software Developer and Designer, Maxar Technologies

Ypsilanti, MI | March '23 - April '25

- Built full-stack SAR image analysis application with Vue.js/Tailwind frontend and Python backend, enabling non-technical users to perform complex geospatial analysis through an intuitive web interface.
- **Defined end-user and business needs** to determine optimal **front-facing design** and flow of image analysis engine.
- Developed high-performance image processing algorithms with multiprocessing optimization, significantly reducing analysis time for large datasets.

Web Developer and Designer, Foundations Pre-School of Washtenaw County

Ann Arbor, MI | May '22 - September '23

- Developed blog-like informational pages for business use to maximize SEO and online presence for small, local business using JavaScript, React, and CSS.
- Defined business needs through the design process and iterated on these designs.
- Created proprietary tools in Python to help streamline and accelerate business needs. Tools created, like an automated web-scraping background-check for volunteers, increased productivity by 120%.

Skills

Technical: Figma, Framer, HTML, CSS, JavaScript, Svelte/SvelteKit, TailwindCSS, Git

Management: Agile, Waterfall, GitLab, Bitbucket, Jira