Timothy Hostetler, Software Engineer

Maryland, tim@thost.dev

PROFILE

Front-End Developer with 7+ years of experience leading the development of high-impact web applications, including NASA ADS's "Bumblebee" and "Nectar" projects. Proven track record of enhancing site performance and user experience, with a focus on accessibility and scalability. Demonstrated ability to drive significant project improvements, mentor teams, and implement modern web technologies.

EMPLOYMENT HISTORY

May 2017 — Present

Full-Stack Web Developer, Astrophysics Data System

Cambridge, MA

"Bumblebee" Project:

- Optimized Build Processes: Achieved a 30% increase in site speed by implementing efficient build
 processes and comprehensive caching strategies, enhancing overall site reliability and user satisfaction.
- Maintained Legacy Systems: Successfully maintained and improved a complex production environment built on Backbone and RequireJS, ensuring stability and usability for a global user base.
- Performance Optimization & Accessibility: Spearheaded efforts to improve site speed by 50% through
 advanced bundling techniques and client-side caching strategies.
 Conducted accessibility audits, elevating the site's compliance from A to AA standards and integrating
 accessibility best practices throughout the development life-cycle.

"Nectar" Project:

Fastify

- Led Modernization Efforts: Spearheaded the transition to a modern tech stack using Next.js and TypeScript, resulting in considerable improvement in load times and enhanced security features.
- Accessibility Leadership: Led efforts to ensure WCAG compliance, expanding our platform's
 accessibility and making data accessible to a broader audience, including those with disabilities.

Cross-Functional Collaboration:

"MyADS" Notification UI: Directed the development and integration of a personalized notification
system, increasing user engagement. Coordinated with UX designers and data curators to align the project
with user needs and organizational goals.

Aug 2014 — May 2017

Software Engineer, Intermedix

Pittsburgh, PA

UI Toolkit Development: Developed a standardized UI toolkit used across the company, streamlining the
development process and ensuring a consistent look and feel across all applications. This initiative reduced
development time for new features by 20%.

WCAG compliance, JAWS

 Geo/Map Component Leadership: Led the creation and enhancement of geo/map components, resulting in more accurate and efficient data visualization tools that improved user decision-making capabilities.

| EDUCATION | | | |
|-------------|--|--|----------------|
| 2010 — 2012 | MS in Applied Computer Science, Frostburg University | | Frostburg, MD |
| 2006 — 2010 | BS in Information Technology, Robert Morris University | | Pittsburgh, PA |
| 2017 | UX Engineering, Harvard Extension School | | Cambridge, MA |
| SKILLS | JavaScript, TypeScript, Python, Java, Node.js | Google Analytics, Looker Studio, Google Tag Manager, Git, Docker, GitHub Actions | |
| | Next.js, React, Vue.js, Express.js, | | |

| DR O | JECTS |
|------|-------|
| PKU | IECIS |

Jan 2021 — Present Design and Development of ADS User Interface ("Nectar")

ADS

Led the design and implementation of a modern web interface using Next.js and TypeScript, focusing on speed, security, and accessibility. Enhanced site performance by 50% and elevated accessibility standards from A to AA.

Oct 2022 Web Accessibility Talk at ADASS 2022 and Paper Submission

ADS

Delivered a presentation on web accessibility challenges and solutions, sharing insights from leading accessibility audits and implementing best practices.

Aug 2012 — Dec 2012

Robotic Path Finding Using Simplified Simulated Annealing

Frostburg University

Designed a robot utilizing a simplified Simulated Annealing algorithm for pathfinding, demonstrating advanced problem-solving and programming skills.