

Koby Fowler

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SUMMARY

Experienced Software Developer skilled in designing, installing, testing, and maintaining software systems. Proficient in multiple platforms, languages, and embedded systems. Familiar with cutting-edge development tools and procedures. Effective at self-management and collaborative team work.

EDUCATION

Bachelor of Science in Computer Engineering

Iowa State University • Ames, Iowa

EXPERIENCE

Software Engineer

Korio, Inc.

October 2024 - Present, Remote

- Developed and maintained mission-critical application functions using JavaScript and TypeScript, supporting pharmaceutical trial management and data analysis workflows.
- Designed and implemented robust data change scripts for production-level MongoDB database management, ensuring seamless daily operations and data integrity.
- Provided real-time production support through development of automated database interaction tools, significantly reducing manual intervention time and potential for errors.
- Architected full-stack JavaScript/TypeScript solutions that enhanced application reliability and maintainability across the development lifecycle.
- Collaborated with cross-functional teams to identify, troubleshoot, and resolve production database issues through strategic script development.

Teachers Assistant

Iowa State University

August 2023 - December 2024, Ames, Iowa

- Provided hands-on instruction and mentorship to over 50 students per semester in Introduction to C Programming (CPRE 185), fostering fundamental programming concepts and debugging skills.
- Facilitated project-based learning in Freshman Design (CPRE 186), guiding multiple student teams through complex engineering challenges from conception to completion.
- Developed and delivered targeted instructional support for diverse learning styles, resulting in improved student comprehension of core programming concepts and problem-solving methodologies.
- Conducted interactive laboratory sessions focused on practical C programming applications, providing real-time debugging assistance and code review feedback.
- Mentored multiple student project teams simultaneously, identifying unique technical challenges and implementing tailored solutions to ensure project success.
- Created and graded assignments and laboratory exercises, providing detailed feedback to enhance student understanding of programming fundamentals and design principles.

Full Stack Engineer

John Deere

May 2023 - October 2024, Johnston, Iowa

- Led a cross-functional engineering team in developing and launching a Security Access Control application, overseeing architecture decisions and implementation strategies while mentoring team members.
- Architected and implemented a full-stack TypeScript/JavaScript security application, incorporating robust user authentication and authorization systems crucial for enterprise-wide access management.
- Designed and optimized MySQL database schemas and queries, ensuring efficient data retrieval and maintaining security standards for access control information.
- Developed responsive and intuitive frontend interfaces using modern JavaScript frameworks, resulting in improved user experience and streamlined access management workflows.
- Spearheaded the implementation of security best practices and protocols, establishing standardized access control patterns across the enterprise platform.
- Successfully managed the complete software development lifecycle, from initial requirements gathering through deployment and maintenance, while meeting critical security compliance standards.

IT Solutions

Iowa State University

December 2021 - December 2022, Ames, Iowa

- Provided enterprise-level IT support for a diverse user base of over 30,000 students and faculty, resolving complex hardware, software, and network connectivity issues.
- Managed identity and access management solutions through Okta, ensuring secure authentication and authorization for university-wide systems and resources.
- Troubleshooted and resolved critical network operations issues in real-time, maintaining high availability of essential university services and resources.

- Implemented security best practices and protocols across university systems, protecting sensitive academic and personal data while ensuring compliance with institutional policies.
- Collaborated with IT teams across multiple departments to diagnose and resolve complex technical issues, ensuring minimal disruption to academic operations.
- Developed and maintained documentation for common technical issues and solutions, streamlining the support process and reducing resolution times.

Software Developer - Apprentice

InspectoBot

May 2022 - August 2022, Des Moines, Iowa

- Developed custom drive train control software for autonomous robotic systems, collaborating directly with senior software engineers to implement precision movement algorithms.
- Implemented and tested drive train software modifications under mentorship, ensuring reliable robot mobility and performance.
- Gained hands-on experience in robotics software development while working within an expert-led engineering team focused on autonomous inspection systems.

SKILLS

Technical Skills:

- Languages: JavaScript, TypeScript, C, Python
- Frontend: React, HTML, CSS (assuming based on full-stack roles)
- Backend: Node.js, Express.js
- Databases: MongoDB, MySQL
- Cloud/DevOps: Git, CI/CD pipelines
- Security: Access Control Systems, Okta, Authentication/Authorization
- Testing: Unit Testing, Integration Testing
- Operating Systems: Linux, Windows

Professional Skills:

- Technical Leadership
- Team Collaboration
- Problem-Solving
- Project Management
- Technical Documentation
- Agile Development
- Production Support
- Mentoring/Teaching