Alexander T. Karapetkov

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Professional Summary

Computer Science graduate (James Madison University, 2024) with hands-on experience in full-stack web development, frontend engineering, and software systems design. Skilled in building scalable applications using React, Node.js, FastAPI, Python, SQL, and integrating REST APIs. Experienced in low-code platforms (Power Apps, Power Automate, Power BI) and IT support. Passionate about developing user-centered solutions and optimizing workflows. Holds certifications including Microsoft Power Platform Fundamentals, CompTIA Security+, CASP+, and completed TCM Security SOC 101 training.

Technical Skills

- → Languages & Frameworks: JavaScript (React, Node.js), Python, Ruby, C, Java, HTML, CSS, SQL, VBA, Verilog, C# (Unity)
- → Web & App Development: Responsive UI, DOM manipulation, REST APIs, Mobile-first design, Canvas & Model-driven apps, UI/UX best practices
- → **Databases & Tools:** PostgreSQL, Dataverse, Power BI, Excel (pivot tables, complex functions), Git/GitHub, VS Code
- → **Software Engineering:** Agile/Scrum, SDLC, Test-driven development, Modular code design, Version control, CI/CD principles
- → Other Tools: Figma, Unity, Vivado, ServiceNow, Active Directory, Splunk, Wireshark, Nmap
- → **Soft Skills:** Problem-solving, Analytical thinking, Team collaboration, Communication, Project ownership, Time management

Relevant Projects

Task Manager Web App | Node.js, React, FastAPI, PostgreSQL In Progress

- → Built a full-stack task management application with a dynamic, responsive UI, enabling real-time task updates and notifications.
- → Integrated REST APIs for seamless CRUD operations and multi-user collaboration.
- → Implemented accessibility and mobile-first design, improving usability across devices.

- → Developed a responsive, mobile-friendly portfolio to showcase projects, emphasizing clean UI/UX and semantic HTML.
- → Leveraged GitHub Pages for deployment and CI-style version control.

- → Designed a centralized Power Platform solution for managing parking operations, improving request processing by 40%.
- → Automated workflows with Power Automate for approvals, notifications, and status updates.

→ Created Power BI dashboards to monitor KPIs and support data-driven operational decisions.

- → Developed a model-driven app to log and track school maintenance issues with automated lifecycle management.
- → Integrated SharePoint document storage and backend data sync for improved operational efficiency.
- → Delivered interactive dashboards that reduced issue response times by 25%.

Spreadsheet App | Ruby December 2023

- → Built a terminal-based spreadsheet application with a custom interpreter supporting formulas and control flow.
- → Modular design and functional programming principles ensured maintainable and scalable code architecture.

- → Developed a custom shell supporting interactive and batch modes with advanced piping and environment management.
- → Implemented a finite state machine parser, improving code extensibility and maintainability.

- → Created an immersive VR experience simulating climate change effects, enhancing interactive learning and storytelling.
- → Engineered multi-scene architecture with triggers and teleportation-based locomotion for seamless user interaction.

Professional Experience

Help Desk Technician at James Madison University April 2023 - May 2024

- → Provided technical support for hardware, software, and networking issues, resolving >90% of incidents on first contact.
- → Managed tickets in ServiceNow and guided users through troubleshooting processes.

Intramural Sports Site Manager at James Madison University August 2022 - May 2024

- → Oversaw operations and staff for intramural programs, ensuring compliance with safety protocols.
- → Conducted training sessions and pregame meetings, improving program efficiency and participant satisfaction.

Education

B.S. in Computer Science

James Madison University, 2024

Relevant Courses: Algorithms & Data Structures, Software Engineering, Application Development, Interaction Design, Virtual Reality Applications, Computer Architecture, Applied Algorithms

Certifications and Training

CompTIA Security+ | CompTIA CASP+ | Microsoft Power Platform Fundamentals (PL-900) | TCM Security SOC 101 Practical Training | Microsoft Power Up Program