James Spillmann

Software Engineer (On-Site) | New York, NY 10009
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Technical Skills

Languages: Python, TypeScript, C++, HTML, CSS, SQL
Services: AWS Services, Docker, Redis, Git, Jira, Bitbucket, Airtable
Libraries and Frameworks: React, Node.js, React.js, FastAPI, GraphQL, AWS CDK, Pandas, NumPy, httpx, NVM Express
GitHub: https://github.com/jjspill

Professional Experience

Software Engineer, SPACInsider *Sept. 2023 – Present*

- Architected and implemented a scalable RSS feed aggregator leveraging AWS Lambda and DynamoDB, with Airtable integration and XML Pull Parser for asynchronous, streaming functionality. Enhanced system reliability with robust error handling, continuous monitoring via Sentry, and automated deployments through Bitbucket Pipelines
- Updated frontend to seamlessly integrate with new backend architecture, employing SWR for efficient data fetching and caching. Leveraged Next.js API routes to enable real-time pagination and search functionalities and implemented virtualized lists to optimize performance and user interaction
- Engineered a Hono-based AWS Lambda API for real-time synchronization of calendar events from Airtable, utilizing PostgreSQL for data integrity and secured access via AWS Route 53 and Secrets Manager
- Utilized AWS CDK to define and deploy cloud resources programmatically, integrating CloudFormation within CI/CD pipelines to manage preview and production environments efficiently, ensuring seamless transitions and robust system architecture
- Led on-call troubleshooting efforts and integrated Sentry with Google Chat for real-time error monitoring, significantly enhancing response times and resolution rates
- Authored comprehensive READMEs and design documents for 64 repositories, creating a detailed knowledge base and significantly improving onboarding processes and ongoing project maintenance

Firmware Validation Engineer, Solidigm / Intel *June 2021 – June 2023*

- Developed a Python-based GUI, improving test workflows, cutting initiation times by over 50%, and saving over 20 labor hours
- Utilized Intel's Firmware Automation System Test (FAST) to conduct SSD validation tests, efficiently triaged and debugged test failures, thoroughly documented the processes in Jira, and collaborated with relevant teams to determine optimal solutions
- Post Intel to Solidigm transition, collaborated on evaluating an expanded SSD inventory, adapting over 200 tests involving legacy commands to ensure compatibility, and documenting necessary adjustments for seamless system integration
- Managed the integration and health of SSD client pools, increasing the number of available hosts by executing complex command procedures recovering SSD clients from failed states, enhancing continuous validation testing efficiency

Projects

MovieMagnet *Individual Project*

- Developed a dynamic movie recommendation engine using React and Node.js
- Built a robust Python-based backend, utilizing advanced asynchronous programming techniques for data aggregation and filtering from TMDb API, enhanced by GPT-4 for nuanced user specifications
- Elevated user experience by leveraging React Hooks, Context API, and framer-motion to create a visually engaging UI

TruBlu, EECS 497 *University of Michigan*

- Developed Flask-Python application revolutionizing college tours, shaped by in-depth survey analysis of over 50 students
- Engineered an SQLite database schema that effectively managed user-profiles and tour guides
- Applied an algorithm to intuitively connect users with optimal tour guides based on diverse set of user parameters

Education

University of Michigan *Aug. 2019 – May 2023*

B.S. in Computer Science and Cognitive Science

- GPA: 3.68/4
- Relevant Coursework: EECS 481 (SWE), EECS 388 (Intro Computer Security), EECS 484 (Database Management), EECS 281 (Data Structures and Algorithms), CogSci 445 (Machine Learning/NLP), Psych 449 (Decision Processes)