Karson A. Kalt

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PROFESSIONAL SUMMARY

I'm a product-focused full-stack engineer specializing in designing and building exceptional user experiences. I am known for creating scalable design systems and UI modules, API design, designing code sharing solutions, web accessibility (a11y), and collaborating with design teams to develop customizable components that enable front-end developers to build faster and scale efficiently. I consider myself a people-first person and enjoy working with non-technical stakeholders to define product requirements. I work best in the dynamic environment of startups, fostering team culture and building relationships while promoting continuous learning and defining best practices.

TECHNICAL SKILLS

TypeScript, JavaScript, Browsers, Node, npm, React, Express/Koa, Apollo, GraphQL, REST, Vite, Webpack, D3, Jest/ Vitest, Pytest, React Testing Library, Cypress, Storybook, Chromatic, IoC Terraform, GitHub Actions, Jenkins, Elasticsearch, neo4j, AWS Lambda, AWS Dynamo, AWS RDS, AWS S3, Web Accessibility (A11y), Browser Performance Optimization, Microfrontends, Microservices, Git, Design Systems, Figma, Agile, Scrum

PROFESSIONAL EXPERIENCE

Senior Software Engineer and Team Leader – ApplicationsJupiterOne

July 2023 - Present New York, NY

Graph Database Anomaly Detection

- Lead a cross-discipline team of Data Scientists and Software Engineers, enabling faster innovation and product delivery, successfully shipping anomaly detection for our graph database.
- Improved system reliability and maintainability by integrating Poetry, Pylint, MyPy, and PyTest into CI/CD to strengthen code quality, package management, type checking, and testing.
- Transformed Databricks Notebooks into a production system using Spark, Pandas, NumPy, and ElasticSearch.
- Modularized Databricks jobs by breaking apart processing tasks, enabling targeted retries without full job reruns.

Natural Language Querying

- Designed and developed the integration of generative AI into our search experience, converting natural language to our query language. Resulted in one of our highest adoption rates and helped accelerate platform time-to-value.
- Implemented a vector database embedding cache, improving query response times and reducing operational costs.
- Implemented Natural Language Processing (NLP) techniques including fuzzy matching and stop word filtering to enhance search precision.

Software Engineer – ApplicationsJupiterOne

February 2022 - July 2023 New York, NY

Design System Development

- Spearheaded the development of JupiterOne's design system, including creation of a comprehensive component library, design tokens, and theming system. Helping to streamline the development process and enabling engineers to focus on core feature development.
- Supported and ushered adoption of the design system which led to WCAG 2.1 AA and FedRAMP compliance, enabling eligibility for government contracts and acquisition of new accounts.
- Crafted standardized-yet-customizable component APIs through a mix of composability, customization, and "component slots". Balanced flexibility with ease-of-use, allowing for customization without excessive rigidity. Leveraged standard naming conventions and JSDoc for streamlined development.
- Led the initiative to adopt Storybook and Chromatic for visual regression and interaction testing across the application, helping improve deploy confidence and proactively protecting against UI issues.

Monolith to Microfrontend App Transition

- Supported the implementation of single-spa to transition our React monorepo to a microfrontend architecture, which resulted in expedited PRs, minimized merge conflicts, and accelerated deployment times.

- Organized shared code to domain-specific npm packages, fostering a maintainable approach to code sharing.
- Centralized repo configs for linting, validation, repo configurations, code formatting, and project configs helping to promote consistency and scalability across a distributed system.

Software Engineering Technical Coach

October 2021 - January 2022

Flatiron School

New York, NY

- Designed and implemented unit tests using Jest and React Testing Library to assess and validate the functionality and quality of student code submissions.
- Led non-CS background students in their initial environment setup, providing instruction on CLI basics, Git, and GitHub.

Field Implementation Business Partner – New Stores and Remodels

June 2014 - September 2021

New York, NY

Target (Store Operations)

- Directed and managed field teams, general contractors, and various trades across 9 large-scale, multi-million dollar construction projects across the US, ensuring timely completion within budget and quality standards.
- Collaborated closely with diverse businesses and stakeholders throughout the construction project lifecycle, fostering effective communication and alignment to optimize construction schedules and minimize operational disruptions.
- Proactively addressed construction-related challenges and obstacles during construction projects, leveraging strong problem-solving skills and collaboration with stakeholders to adapt to changing conditions and ensure success.
- Received recognition for exceptional project management skills and continuous improvement initiatives.

COMMUNITY INVOLVEMENT

Mentor March 2022 - November 2023

Code The Dream New York, NY

- Acted as a mentor for low income and BIPOC students who are new to tech. Taught students the fundamentals of Express, React, MongoDB, and GitHub.
- Worked with 26 students and supported them in the job search process.

EDUCATION

Utah Valley University

B.S. Digital Marketing

April 2014

Salt Lake City, UT

- Magna Cum Laude
- Leadership Certification with High Distinction
- National Conference on Undergraduate Research
- 1st Place American Marketing Association Strategy National Competition

REFERENCES

Professional references available upon request.