# Evan Dower, Staff Software Engineer

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Remote/Seattle, seeking visa sponsorship and relocation to Australia or New Zealand

- · rapidly delivers results even in new domains due to quickly gaining in-depth knowledge
- delivers incrementally, with a focus on using data to determine whether further investment makes business sense
- supports team cohesion & productivity by supporting teammates' growth

# Experience

# Indeed, Seattle, WA

At Indeed, I grew my leadership, mentorship, architecture, and frontend skills. I gave management a try for a couple years. The work felt valuable & important, but I missed the satisfaction and day-to-day feelings of accomplishment that come with individual contribution. When transitioning back from management to IC work, I took the opportunity to change domains and learn new skills by moving to a frontend-focused team.

### Staff Software Engineer (Frontend Platforms) - April 2019 to present

#### **Platform Development & Architecture:**

- build & productionize micro-frontend framework, decoupling hundreds of content provider teams & dozens of consuming webapp teams to allow both to iterate quickly & independently
- own global header used across almost all Indeed pages & webapps while expanding coverage, iterating on content, and rewriting to take advantage of Indeed's new design system
- designed & implemented JavaScript dependency sharing solution using webpack module federation, reducing page weight by avoiding duplicate downloads across decoupled components
- drove exploration/validation of webpack module federation as mechanism for UI decoupling, becoming one of Indeed's few SMEs for this technology
- $\bullet \ \ created \ shared \ scope \ and \ libraries \ that \ abstract \ complex \ module \ federation \ details \ away \ from \ customers$
- provide a platform for delivering non-UI capabilities (e.g. observability, cookie compliance, etc.) across all Indeed products

# Performance & Optimization:

- improved performance impact & safety of global navigation header, including reducing initial bundle size by 48%, improving isolation, and using module federation to enable dependency sharing
- delivered shared-deps event loop turning improvement achieving 0.68% overall worldwide sitespeed improvement, leading to 0.34% increase in Homepage Job Clicks and 0.31% increase in Total Indeed Applies
- reduced GNAV payload size by 84% to improve Indeed Mobile performance
- worked with Marketing to remove Google DCM tag from mobile search, achieving 1-3% sitespeed improvements
- created comprehensive 2024 SiteSpeed Opportunities analysis forming the sitespeed roadmap for Job Seeker products
- improved performance of data analysis pipeline by >10x while also improving correctness

#### **Technical Leadership & Problem Solving:**

- facilitate smooth adoption of module federation across Indeed by building libraries that act as guard-rails around the core features of module federation, which have lots of sharp edges, including fixing bugs in webpack itself
- investigated and solved Dradis plugin race condition issue by upgrading render service from Preact to React 16, simplifying development experience
- prevented production incidents by catching nuanced dependency issues between core systems
- improved automated testing and streamlined release processes in order to achieve full push-on-green CI/CD
- organized failure modes brainstorming and improved deploy processes including multi-branch builds and auto-ticket management
- quickly investigated & addressed high severity production issues
- primary owner of critical index builders supporting JobSearch SLOs, resolving 2 major incidents with Data Platform coordination

#### **Cross-Organizational Impact:**

- $\bullet \quad \text{served as UI Platform Web US representative in Journey tech leads sync, expanding influence beyond immediate team}\\$
- main point-of-contact for VM2 security vulnerability, coordinating resolution across teams

- provided architectural guidance to multiple teams including JSMA on native navigation and Viewjob team on re-use initiatives
- supported React 18 and IFL 6 rollouts across Indeed, advocating for upgrades and identifying implementation paths
- · designed & planned initiative to add page weight observability to all Indeed products

#### Mentorship & Recruiting:

- advise & mentor teammates and other engineers across the company, including helping them break work into incremental deliverables, prioritizing early risk-discovery & risk-reduction
- · mentored Sr. Cloud Solutions Engineer via Mentor Connect on Terraform best practices and influencing others
- conducted 23+ interviews per cycle, graduating to calibrated interviewer for FE Whiteboard, Code Review, and Architecture interviews
- · supported 92 distinct external contributors to Global Nav platform through code reviews and guidance

**Tech Stack:** JavaScript, TypeScript, NodeJS, React, Emotion, Webpack, Module Federation, Cypress, Java, Spark (Scala), DataDog, Terraform

#### Software Engineer / Technical Delivery Manager (SMB Hiring) - July 2017 to March 2019

- manage the performance & development of 6 software engineers to help them grow to their potential
- get buy-in from the team to initiate development processes and promote best practices to ensure team efficiency
- guide coordination with our cross-functional team members, including 1 designer, 1 quality assurance engineer, 1 data scientist, & 2 product managers
- collaborate with other teams to help them & us achieve business goals
- · work with other teams to form cross-organization plans
- guide business & technical direction of the team
- · provide input to design reviews throughout the company
- led team to achieve quarterly goals including >3% of jobs with context-specific questions and 116 new question types (surpassing goal of 100)
- increased jobs with screener questions in Italy, Spain & France by 68% (from 44% to 74%) while maintaining >60% acceptance rate
- $\bullet\,$  delivered high utility question identification, increasing employer positive response rate by 8%
- built automation infrastructure for dev-free question creation, including proctor test creation and automated verification screenshots
- · coordinated event handling & prevention across SMB Hiring teams, providing technical leadership during production issues

# Senior Software Engineer / Tech Lead (SMB Hiring) - January 2017 to June 2017

- $\bullet \;\;$  guide the technical direction of the team
- mentor 4 software engineers to help them grow their technical skills
- collaborate with other teams to help them & us achieve business goals
- delivered 6 new question types, increasing total by 50%, including innovative "firsts": localized education (first locale-dependent question), nursing degree (first vertical-specific question), and shift availability (first multi-select question)
- maintained service reliability with over 5 9's uptime on almost 1.5B calls

# Software Engineer (SMB Hiring) - August 2015 to December 2016

### Leadership:

- Worked with product management to collaboratively define data-driven quarterly goals.
- Led a team of 4 engineers to track & meet those goals.
- Participated constructively in design reviews
- Interviewed candidates in coding/problem-solving interviews as well as architecture interviews.

#### Individual Contributions:

- Demonstrated proof-of-concept for increasing job requirement suggestion acceptance rate by 15%. A/B testing
- Achieved ~1.3 million question suggestions accepted in Q4 2016 with order-of-magnitude improvement quarter-over-quarter
- $\bullet \ \ \text{Increased overall suggested question acceptance rate from 25\% to 43\% and outside-US acceptance rate from 18\% to 32\% and outside-US acceptance rate from 18\% to 32\% acceptance rate from 18\% acceptance rate fro$
- Designed & implemented client-focused data-driven API to help decouple client & service changes. Java, Spring, Jackson, Protobuf
- Introduced numerous best-practices and tools to reduce coding errors, and guided teams across the company in their use.

- Immutables, Jackson, Fongo, Checkstyle, Spring-Data-MongoDB, AssertJ
- Created abstraction between persistence layer and API, introducing Spring Data to support key team initiatives
- Implemented Pig script to filter out underperforming suggestions, achieving ~15% suggestion acceptance improvement for specific job titles
- Improved location service algorithm and JUnit parameter support as Indeed-wide infrastructure contributions
- Dug deep into other teams' code in order to address production issues as well as internal productivity issues. Python, Django,
   Java

# Amazon, Seattle, WA

In my decade at Amazon, I grew into a full-stack developer, owning (gathering requirements, designing, developing, monitoring, & maintaining) libraries, services, DB schemas, distributed systems, websites, & single-page apps. I demonstrated leadership by mentoring interns & junior engineers, leading to hires and promotions. Furthermore, I was liked and respected by my peers and customers due to my tact, CS fundamentals, quality-focus, breadth of knowledge of company-wide systems, and ability to dive deep & resolve complex/hidden root causes even in unfamiliar systems.

### Software Development Engineer (Developer Productivity Tools) - December 2006 to July 2015

In reverse-chronological order:

- Worked as part of a team to implement a code browser (think "GitHub for Amazon") with innovative features such as "alwayson blame", visual DAGs, elegant client-side change views, commenting, and pull-requests. Ruby on Rails, AngularJS,
  CoffeeScript, Java, Git, NoSQL (DynamoDB)
- Worked as part of team to implement highly available, horizontally scalable revision control, supporting >300k Git repositories for >10k developers. Java, Distributed Systems, Git, Oracle
- Designed & built an authorization system to model access control while abstracting the backend in order to protect clients from changes in a space that has historically shown substantial volatility.
- Led a team to implement a system supporting company-wide continuous deployment, modelling and automating ~40k release processes. Java, Ruby on Rails, Oracle
- Improved deployment scheduling algorithm from O(n^3) to O(n^2), allowing Amazon to scale deployment capacity to handle
  Q4 loads, allowing development to continue and potentially saving many millions of dollars.
- Owned internal revision control systems, including implementation of monitoring, throttling, and a hot standby system. The
  depth of understanding I was able to reverse-engineer allowed Amazon to terminate their support contract with Perforce,
  saving ~\$1M per year. Perforce, Perl
- Owned multiple generations of internal code review systems, including gathering requirements and designing features. The
  latest generation handles ~6k CRs per day and serves >10k users across the company. Python, Java, Perl/Mason, MySQL

# Software Development Engineer (Ordering) - March 2005 to December 2006

- Owned reporting and improving stuck/delayed order metrics, including coordinating with other teams to resolve root causes.
- Owned marketplace seller order management used by all Amazon sellers (both backend services and web frontends). Java, C++, Perl/Mason, Oracle

# Education

University of Washington, Seattle Bachelor of Science (B.S.), Computer Science 2001 - 2005