YUSUF SIMONSON

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Work

The Muse - *Chief Technology Officer* — 8/2012 - 1/2018

- Scaled engineering team from 2 to 27, playing an active role in recruitment and hiring
- Managed & lead the team from the seed round through series B
- Established engineering best practices and norms, such as career ladders, remote work policies, hack days, product groups, and "agile-ish" workflows
- Gave talks and wrote articles to promote The Muse as a great place to work
- Acted as the first fullstack engineer, directly contributing:
  - The initial web application, built with python/tornado, go and coffeescript
  - Continued iterations of the product and backend architecture to scale from thousands to millions of MUVs
  - ETLs for extracting and normalizing tens of thousands of job descriptions from clients across over a dozen applicant tracking systems
  - A merger of two disparate platforms, contributing a substantial increase in site and SEO performance
  - Open sourcing of various components, including a web framework, a large asset filesystem for git, and several tools for integration testing and increasing site performance
- As a manager and leader, oversaw and coordinated with various teams and engineers to help create:
  - Many continued product, performance and SEO-related iterations of the site
  - An engine for consuming and indexing millions of daily events, using go, redshift, and athena
  - An incremental migration from heroku to AWS
  - A migration from a monolithic architecture to microservices
  - A rewrite of the middle-tier from coffeescript/mithril to typescript/react

Docker - *Software Engineer* — 2/2012 - 7/2012

- Designed an RPC framework
- Experimented with abstractions that would allow for server-less applications

Google - *Associate Product Manager Intern* — 5/2011 - 8/2011

- Redesigned YouTube's digest emails, increasing CTR by 100%
- Created a platform for increasing partner video viewership by 60%
- Designed an alternative search interface for YouTube on tablet devices

TransLoc - *Software Developer* — 2/2010 - 8/2010

- Created a novel algorithm to filter noise in GPS data
- Architected a tool for debugging real-time geospatial information
- Designed a framework for interacting with SMS interfaces

IBM - *Various Positions* — 5/2006 - 7/2009

- Conceptualized and implemented a new search relevancy algorithm
- Filed a patent on geospatial security policies (application #12647681)
- Developed software that demonstrates IBM end-to-end solutions in a virtual immersive environment
- Leveraged Macromedia Flex to create a cross-platform virtual immersion software development kit

Microsoft adCenter - *Software Developer Intern* — 5/2008 - 7/2008

- Dropped the amount of time required to conduct post-hoc analysis of ad relevancy algorithms by nearly an order of magnitude, by converting sequential algorithms to parallel
- Implemented a new ad relevancy algorithm using map/reduce
- Designed reports to provide a statistical analysis of ad relevancy algorithms

North Carolina State University - *Teaching Assistant* — 1/2006 - 5/2006

- Teaching assistant for CSC116: Introduction to Computer Science

Research	### The University of North Carolina at Chapel Hill 8/2010 - 12/2011

The University of North Carolina at Chapel Hill   8/2010 - 12/2011

- Designed and implemented a modern version of generative communication, which allows for significantly increased productivity in designing distributed systems
- Performed graph analysis on citation graphs to find academically influential institutions, departments and individuals

North Carolina State University   8/2009 - 12/2009

- Created a RESTful web service for delivering real-time recommendations using a modified version of the TANGENT algorithm
- Designed an open source thin web framework and key-value store

Education

The University of North Carolina at Chapel Hill (2010 - 2011)
M.S., Computer Science; No GPA
North Carolina State University (2005 - 2009)
B.S., Computer Science; 3.55 GPA; Magna Cum Laude

Open Source

Active open source contributor. Please see my github profile at: https://github.com/ysimonson.

A selection of projects I've contributed to:

- tornado: A python web framework and asynchronous networking library
  http://github.com/facebook/tornado
- servo: An experimental web browser by Mozilla, written in rust.
  https://github.com/servo/servo
- cargo: The rust package manager
  https://github.com/rust-lang/cargo
- clippy: The rust linter
  https://github.com/rust-lang-nursery/rust-clippy

A selection of projects I've managed:

- IndraDB: a graph database written in rust
  https://github.com/indradb/indradb
- zerorpc-node: A node.js implementation of ZeroRPC
  https://github.com/0rpc/zerorpc-node
- git-fit: Handling large assets in git with ease
  https://github.com/dailymuse/git-fit
- oz: Middleware and scaffolding for tornado-based web applications
  https://github.com/dailymuse/oz