

# Josh Kellerman

<https://www.joshuamk.com/engineering>

## EXPERIENCE

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### Consultant (part time)

Aug 2018 — Present

Yubico – Palo Alto, CA

- Commercial Video Production and Website consultation

### Senior Software Engineer

Dec 2018 — Aug 2019

Mosaix.ai – Palo Alto, CA

- Hired, mentored, and trained team members in NLU (research) and API teams
- Re-architected NLU engine and saw a substantial gain in quality of service (4000% overall application query throughput, stability increased to 100% up to 20 concurrent requests with > 50% reduction in individual query latency)
- Built out testing / debugging / logging framework for components in API and NLU engine. Identified bottlenecks. Increased server throughput, reliability, stability. Set up cloud-based common development back end for NLU Engine to ensure consistency among developers.
- Designed, prepared data for, updated and trained machine learning ranking models, knowledge graph for Spotify data. 200% higher coverage and 2-3% higher accuracy.
- Rebuilt the cache / Recommendations engine for tight deadline. Now fluidly serving hundreds of thousands of Arabic and Hindi requests daily as end-users are using the product. About 400% faster.
- Lead for "text analysis" components service for NLU engine where customers can buy use of any one micro-service. Evaluated for end-users' use by a top-10 worldwide company.
- Integrated Dockerized Python as micro-service into the NLU Engine to host Tensorflow as well as Stanford NLTK
- Oversaw / advised design of data structure and edges for Wikidata scraping for Personal Assistant SDK.
- Designed and helped implement blacklisting system for offensive content, keyed by country and language.
- Business logic such as third party API business components, rate limiter, recommendation engine
- Used Python, Java, Scala, Typescript, JavaScript, Redis, MySQL, C++, Bash, Ubuntu & Alpine Servers on AWS and Google Cloud Platform

### Lead User Experience Engineer

Sept 2017 — Aug 2018

Yubico – Palo Alto, CA

- Oversaw research, design, and implementation of UX / UI on desktop/mobile, web applications, packaging, and media
- Spearheaded remake of the Windows Login Tool through UX research
- Designed a common User-Flow experience **for all of U2F web-facing apps**, for technology partners
- Implemented a task-oriented intake system that interfaces with other departments and stakeholders
- Main point of contact and project owner for Web Team, specializing in interdepartmental communication
- Involved in the planning and implementation of website architecture based on Magento API, NodeJS / Express.js, Docker, Kubernetes, SCSS, Webpack, React with Redux store and Jest.
- Redesigned and implemented UI for YubiKey Manager 1.0.0 in QT Creator and QML, and Python
- Expanded web team by hiring on and leading additional team members
- Maintained all responsibilities noted in the previous roles, including head of Video production

### Web Developer (Full Stack)

Sept 2016 — Sept 2017

Yubico – Palo Alto, CA

- Promoted within first six months after demonstrated engineering ability
- Actively served as full stack lead developer and code maintainer of Yubico's website
- Lead developer on a project to redesign Yubico's online store, resulting in major performance increases
- Served as a Lead QA for the migration of Yubico's website to a dedicated, Yubico designed hosting platform
- Lead the development of Yubico's Facebook-specific integration page during a weeklong sprint
- Tasked with scaling Yubico's online presence with server resources in preparation for anticipated spikes in load
- Designed and implemented a full-stack, secure order portal for a large Silicon Valley company

### Front-End Web Developer / Designer

May 2016 — Sept 2016

## **Yubico – Palo Alto, CA**

- Working internally with Yubico's CTO and Head of R&D, engineered the **YubiKey for Windows Hello** application
  - This was one of the first applications built to take advantage of the Windows Companion Device Framework
  - This application was displayed on stage during the Microsoft Ignite 2016 keynote
- Served as director/editor for all Yubico created marketing video content and imagery
- Prototyped, designed and developed Yubico's "Solutions Integrations" page in D3.JS and JQuery
- Developer, designer, and code maintainer of Yubico's website – Wordpress / WooCommerce with custom theme

## **SES Tutor / Private Tutor (SAT / ACT Prep)**

Jan 2016 — May 2016

### **Oxford Tutoring – Tustin, CA**

- Taught disadvantaged kids English and Mathematics skills in several during and after-school programs.
- Refined teaching skills and learned how to manage a team of 4<sup>th</sup> graders.
- All of my classroom students graduated their grades.

## **SKILLSETS**

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**Multi-lingual** English, French, Spanish

**Programming/Devops/Cloud** C#, C++, Python, Java, OOP, Bash, Docker

**Web Dev** LEMP, Typescript, SQL, React/Node/Express, PHP7, HTML/SCSS

**ML/AI** TensorFlow, Scala, NLTK

## **EDUCATION**

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**COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK (*current*)**, New York, NY, USA

Masters Degree, 2019 – 2022 (ON HOLD FOR FORSEEABLE FUTURE)

**WISCONSIN CENTER FOR ACADEMICALLY TALENTED YOUTH INTERNSHIP**, Madison, WI, USA

Web Programming and Graphic Design Professor, 2015

**UNIVERSITY OF WISCONSIN-MADISON**, Madison, WI, USA

BA in English, 2014

3 semesters taken in Computer Science, 5 in French

Study abroad in 2013-14 in France and attended Grande École Sciences-Po:Aix

Certified in Professional French B2/C1

**UNIVERSITY OF WISCONSIN-MILWAUKEE**, Milwaukee, WI, USA

5 semesters taken in Film, Hand-drawn Animation, Puppetry

Studied under Tim Decker, Ex-Disney Ex-Simpsons Animator

Directed Puppetry Segment for PBS:Kids called "Nocturnal"

## **PORTFOLIO**

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My web portfolio with can be found at <https://www.joshuamk.com/engineering>

Letters of Recommendation available on request