Joshua Netterfield

Khan Academy – 2017 – present

- Architected and implemented flexible challenge system to onboard teachers and motivate students. Used **Flow**-typed **React** and **Google App Engine** for **Python.**

- Improved data collection and processing systems to increase the relevancy and effectiveness of donation drive emails. Used **BigQuery** and **Python**.

- Wrote tools to help content creators and translators educate millions.

Facebook – Internship, late 2016

- Wrote a tool to access current and historical news feed CPU/memory performance data for automated regression testing and analysis. Used **C++**, **SQL**, and **Python**.

- Automated the deployment & host management of a network-constrained service.

Palantir – Internship, early 2016

- Helped build an end-to-end data analysis workflow to identify high-risk insurance members using a **Hadoop** cluster, **JavaScript** and **PostgreSQL**.

Stripe – Internship, summer 2015

- Implemented dispute evidence submission and other user interfaces for the merchant dashboard.

- Implemented a system for efficiently catching visual regressions in web applications. Optimized to run **20 times faster** than the previous solution.

Khan Academy – Internships, summer 2013 and early 2014

- Designed and implemented reports used by parents and teachers to track the progress of millions of students. This was one of the first production uses of **React.** Created scalable backend using **Google App Engine** for **Python**.

BlackBerry – Internship, summer 2012

- Implemented CSS Filter Effects in **WebKit** (**C++**) for the **BlackBerry 10** Browser.

- Improved the rendering speed of text shadows fourfold and raised the **WebGL** aquarium demo frame rate by **60%**.

About Me

I am a software engineer, musician, and husband. I graduated from the University of Waterloo in 2017 with a Bachelor of Software Engineering.

I make **Hacklily** (https://hacklily.org), a web-based sheet music editor and publishing tool. It survived the front page of **Hacker News** and uses **Rust**, **Docker**, **React**, and **TypeScript**.

Before that, I made the **most purchased podcasting app** for BlackBerry 10. I also made a Khan Academy client for BlackBerry 10 during a hackathon that saw a lot of use.

I am an avid learner, builder, and explorer. I thrive in projects where the right architecture isn't obvious and where experience across the entire stack is important.

---

*'[Joshua] walked into a team in need of help and completely transformed its ability to get things done. He just… **produces**. In the course of one summer he completely revamped our entire coach/teacher reporting system from end to end (and managed to launch a fully functional mobile app in his spare time)."*

— Ben Kamens