

# DANIEL HOPPER

I write code in Python, Go, Java, C++, Ruby, Javascript, Clojure, and SQL  
I have built products with Spark, Beam/Dataflow, BigQuery, Hadoop, and MongoDB  
I am experienced in using Kubernetes, Docker, RabbitMQ, Django, and TensorFlow  
I am interested in distributed systems, analytics, and machine learning

## EXPERIENCE

### **Flybits | Backend / Data Engineer | May 2017 – Present**

- Led research and development on the Flybits analytics platform powered by Dataflow and BigQuery
- Actively developed and maintained five production microservices written in Go, including message queue consumers and publishers, user context data aggregators, and APIs for querying the analytics platform
- Deployed and managed Kubernetes clusters and executed end to end testing for microservices

### **Amazon A9.com | Machine Learning Engineer | September 2016 – December 2016**

- Trained ranking models for Amazon Softlines from end to end – involving data gathering, sampling, feature selection, analyzing the model's behaviour, and iterative improvements including parameter tuning
- Built an internal tool for concurrent training of classifiers with the goal of finding correlations in purchases for certain groups of people, and segmenting customers based on their purchase and browsing history
- Conducted feature engineering experiments with large sets of Amazon clickstream data and purchase history, involving development of data processing scripts written in R and Python / Pandas

### **Polar | Analytics Infrastructure Engineer | January 2016 – April 2016**

- Built a large portion of a Spark-based analytics pipeline, incorporating batch and streaming queries to get nearly real-time analytics processing from Polar's MediaVoice platform
- Worked on various data aggregators written in Python and Clojure, with a Django backend
- Deployed distributed VM clusters as test environments for Hadoop and Spark-based applications

### **Hootsuite | Full Stack Web Developer | May 2015 – August 2015**

- Acted as lead developer on the Hootlet Chrome extension, which involved writing many new features and fixing bugs from the alpha release, and designing / implementing new UI components for publishing
- Developed features and fixed bugs on Hootsuite's publishing module and compose area

### **Polar | Software Engineer | September 2014 – April 2015**

- Developed native ad injection scripts, maintained legacy iOS apps, designed native ad placements

## EDUCATION

### **University of Waterloo | Waterloo, ON | 2018**

- 4B Computer Science, Honours, Co-operative Program, Management Studies Minor