




## Experience

-  **Software Engineer Intern | Airbnb** May 2019 - August 2019  
Cloud Infrastructure, Storage | Java, Thrift
- Designed dynamic instance deployment system to counteract the impact traffic skew could potentially have on latency by increasing availability of hotkey partitions
  - Created a monitoring system which tracks the traffic skew across partitions on Airbnb's internal kvstore
  - Designed a distributed traffic dispatcher for load testing in order to overcome physical limitations of resources on given Kubernetes pods
  - Developed an end-to-end benchmarking system to establish capabilities of Airbnb's cloud-based storage solutions
-  **Software Engineer Intern | Google** May 2018 - August 2018  
Ads Integrity, Risk | Java, MapReduce, Python
- Wrote scripts to optimize thresholds in a model that catches fraudulent spending, resulting in an estimated \$1.67 million in savings per month
  - Created a pipeline to transform a collection of several hundred thousand piecewise functions into 6 continuous polynomial functions
  - Optimized the aforementioned functions with a closed-form solution, through the differentiation of a multivariate equation
-  **Software Engineer Intern | VMware** June 2017 - August 2017  
Global Services Innovation & Engineering | Java, Python, Tensorflow
- Implemented a neural net that correctly classified which error a given text extraction resembled with a >99% accuracy rate
  - Built features for the potential error data set based on the principles of most k chars hashing in order to avoid the inconsistent placement of characters
  - Cleansed text extractions through a keyword based search and deletion

## Education



**Software Eng @ Western University**  
Bachelor of Engineering Science  
3.7 GPA, Dean's List | 2016 - 2021



**Ivey Business School @ Western University**  
Honors Business Administration  
Lori Muir Melnyk Award | 2018 - 2021

## Publications

Knowles, C. and **B. Pratt** (2017), "Character Frequency Approach to Classifying and Labelling Optical Character Recognition Text Extractions."  
*Published internally at VMware and currently being processed for external publication.*

## Activities & Projects



**Head of Quantitative Vertical**  
**Mustang Capital**  
Sept 2018 - current | \$50k AUM

- Lead the development of quantitative investing strategies for our fund
- Host educational sessions on trading



**Jane Street Electronic Trading Competition**  
**5th Place | July 2018**

- Created a real-time algorithmic trading platform that used price spreads to successfully perform statistical arbitrage



**Ivey Business Review Editor**  
Apr 2019 - current | iveybusinessreview.ca

- Directed and edited the writing of articles for biannual publications



**Hack Western Organizer**  
Apr 2017 - Dec 2018 | hackwestern.com

- Constructed website and backend for the event, used by thousands of hackers



**Jazz Saxophone Performance**

- Play free form & jazz standards in a range of ensembles with classmates and colleagues

## Skills

Java · C++ · Python · MapReduce · Kubernetes · Kafka