## FRIC BAI

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**SKILLS** Languages Python, Java, JavaScript, C++, PHP, Ruby, SQL, HTML, CSS

Technologies React, Android, NodeJS, Git, MVC Frameworks, Linux, TensorFlow, AWS

**Algorithms** Continuously solving algorithm and data structure problems from HackerRank.

Solutions shared at github.com/baieric/hackerRank

# WORK

### **SIGOPT** | SOFTWARE ENGINEER

**EXPERIENCE** | Sep – Dec 2016 | San Francisco, CA

- Designed and implemented native cross-validation experiments, modifying the core API, corresponding infrastructure and website
- Created a neural network to solve a reinforcement learning problem, and wrote a blog post about the algorithm with a performance analysis
- Implemented evaluation metrics to compare the performance of optimization techniques
- Wrote code to show how the SigOpt API is used in ML applications such as text classification

### KIK INTERACTIVE | ANDROID DEVELOPER

Jan - Apr 2016 | Waterloo, ON

- Implemented a complete redesign of Kik's media viewer
- Implemented the handling and sharing of group chat URLs that open in-app
- Debugged memory leaks and adapted highly computational tasks to support older phones
- Created a music trivia chat bot in Python. Placed in Top 3 at Hack Week

### **DESIRE2LEARN** | SOFTWARE DEVELOPER

Jan – Apr 2015 | Kitchener, ON

- Earned peer recognition award for finding and resolving security issues
- Developed controls and views that asynchronously update using callbacks from automated jobs
- Integrated Turnitin API into the learning environment using C#, stored procedures in SQL, and JavaScript

### **REA INC.** | FULL-STACK PROGRAMMER

May - Aug 2014 | Toronto, ON

- Created several websites from scratch using PHP with the MVC pattern
- Designed and implemented complex database schemas and gueries

### RESEARCH UNDERGRADUATE RESEARCH ASSISTANT

**EXPERIENCE** May 2017 – Present | Waterloo, ON

Researching how to apply machine learning algorithms in the field of computational photography.

### PROJECTS | XCERPT | ANDROID APP

Over 3000 downloads, and featured on Wired, CNET, Gizmodo and more. An app for making links posted on Twitter more engaging. Uses asynchronous tasks to process results from Tesseract OCR, Twitter and Bing Search. Conducted UX testing and used Material Design for polished feel.

### THE RESISTANCE | WEB APP

Placed in the Top 10 at EngHack. A multiplayer web app adaptation of the board game "The Resistance" with real time updates. Built with NodeJS and SocketIO in 24 hours.

**EDUCATION** University of Waterloo Bachelor of Computer Science Wilfrid Laurier University Bachelor of Business Administration