

# ERIC 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](https://github.com/baieric/hackerRank)

## WORK EXPERIENCE

### FACEBOOK | SOFTWARE ENGINEER

Sep – Dec 2017 | Menlo Park, CA

- Instagram Protect and Care team

### SIGOPT | SOFTWARE ENGINEER

Sep – Dec 2016 | San Francisco, CA

- Designed and implemented a neural network to solve reinforcement learning problems, and wrote a blog post about the algorithm with a performance analysis
- Modified the core API, corresponding infrastructure and website to implement a native cross-validation experiment feature
- Optimized API response time with efficient queries and asynchronous jobs
- Implemented evaluation metrics to compare the performance of optimization techniques

### KIK INTERACTIVE | ANDROID DEVELOPER

Jan – Apr 2016 | Waterloo, ON

- Implemented a complete redesign of Kik's media viewer, using custom touch events, memory management, and multi-threaded tasks
- Implemented the handling and sharing of group chat URLs that open in-app
- Created a music trivia chat bot in Python. Placed in Top 3 at Hack Week

### DESIRE2LEARN | SOFTWARE DEVELOPER

Jan – Apr 2015 | Kitchener, ON

- Developed controls and views that asynchronously update using callbacks from automated jobs
- Integrated Turnitin API within D2L's learning environment using the MVC pattern

### REA INC. | FULL-STACK PROGRAMMER

May – Aug 2014 | Toronto, ON

- Created several websites from scratch using PHP, SQL, JavaScript, and Bootstrap

## RESEARCH EXPERIENCE

### UNDERGRADUATE RESEARCH ASSISTANT

May – Aug 2017 | Waterloo, ON

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

## PROJECTS

### XCERPT | ANDROID APP

Over 4000 downloads, and featured on Wired, The NY Times, Gizmodo and more. The app makes 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, Minor in Combinatorics and Optimization (expected Aug 2018)

### Wilfrid Laurier University

Bachelor of Business Administration, Entrepreneurship Specialty (expected Aug 2018)