

# Eric Bai

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## SKILLS

### LANGUAGES

Python • JavaScript • Java • C++  
PHP • Ruby • SQL • HTML • CSS

### TECHNOLOGIES

React • Android • NodeJS • Git  
MVC Frameworks • Linux • PostgreSQL  
TensorFlow • scikit-learn • AWS

### ALGORITHMS

Continuously solving algorithm and data structure problems from HackerRank. Solutions shared at  
github.com/baieric/hackerRank

## RESEARCH

### UNDERGRADUATE RESEARCH ASSISTANT

May 2017 - Present  
Researching how to improve machine learning algorithms in the field of computational photography.

## EDUCATION

### UNIVERSITY OF WATERLOO

BACHELOR OF COMPUTER SCIENCE  
Expected Aug 2018

### WILFRID LAURIER UNIVERSITY

BACHELOR OF BUSINESS  
ADMINISTRATION  
Expected Aug 2018

## RECOMMENDATIONS

"Eric has been a great asset to the team. He's inquisitive, detail oriented, and has a strong work ethic. He has a positive attitude and works harmoniously with the team. We will miss him!"  
- Joseph W, Desire2Learn

"Eric is hard working and always shows enthusiasm for assigned work. He consistently delivers quality work and completes assignments quickly. He is a very intelligent individual and will definitely excel in his chosen field."  
- Earl A, REA Inc.

## EXPERIENCE

### SIGOPT | SOFTWARE ENGINEER

Sep 2016 – 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 hyperparameter optimization techniques
- Wrote code to show how the SigOpt API can be used for machine learning applications such as text classification

### KIK INTERACTIVE | ANDROID DEVELOPER

Jan 2016 – Apr 2016 | Waterloo, ON

- Implemented a complete redesign of Kik's media viewer, which involved custom touch events, memory management, and multi-threaded tasks
- Implemented the handling and sharing of group chat URLs that open in-app
- Gained experience debugging memory leaks and adapting 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 2015 – Apr 2015 | Kitchener, ON

- Earned peer recognition award for finding and resolving security issues
- Integrated Turnitin API within D2L's learning environment using C#, the MVC pattern, stored procedures in SQL, and Javascript
- Developed controls and views that asynchronously update using JSON received from callbacks from automated jobs
- Wrote over 100 unit and integration tests using NUnit

### REA INC. | FULL-STACK PROGRAMMER

May 2014 – Aug 2014 | Toronto, ON

- Created several websites from scratch using PHP with the MVC pattern
- Designed and implemented complex database schemas and queries
- Developed front-end designs with responsive interface and Bootstrap

## PROJECTS

### XCERPT | ANDROID APP

Over 3000 downloads, and featured on Wired, CNET, Gizmodo and more. An app for making links posted on Twitter more beautiful and engaging. Uses asynchronous tasks to process results from Tesseract OCR, Twitter API and Bing Search API. 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.