

**PATRICK WONG**  
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## EDUCATION

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**Bachelors of Mathematics**, University of Waterloo October 2016  
Majors: *Computer Science and Computational Mathematics*, Minor: *Combinatorics and Optimization*

## SUMMARY OF QUALIFICATIONS

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### Technical Skills

**Languages** (Proficient) MATLAB, Python, C#, SQL, (Experienced) C++/C, Java, Ruby  
**Frameworks/Tools** Rails, Git, Linux, PostgreSQL

### Relevant Personal Projects

**Rails Tutorial App** February 2017 – April 2017

- Utilized Ruby on Rails framework to create dynamic webpages in HTML/Bootstrap with PostgreSQL database
- Applied test-driven development methodology by implementing functionality around rigorous tests
- Deployed web application onto Heroku's cloud service

**MLB Batted Ball Stat Visualizations** December 2016 – April 2017

- Engineered Python module to produce interactive histograms and scatterplots in HTML
- Organized parsing, analysis, and plotting functionality into a single module
- Performed statistical analysis with the numpy, scipy, and pandas libraries

**notedump** November 2016 – December 2016

- Prototyped several UI designs through application of Model-View-Controller design pattern
- Developed a Windows application from scratch using Visual Studio C#

### Relevant Coursework

#### **Numeric Computation for Financial Modeling**

- Implemented binomial lattice, Monte Carlo, and finite difference methods to price European and American Options

#### **Computational Linear Algebra**

- Applied computational methods to solve eigenproblems, least square problems, and matrix factorization

## WORK EXPERIENCE

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**Technology Intern**, Loring Ward, San Jose, California May 2013 – August 2013

- Fixed and maintained computer hardware, communicating with vendors to resolve complex problems
- Solved user issues with Windows 7, Outlook, and internet browsers

**Assistant**, Gold Gold Travel, Mississauga, Ontario May 2012 – August 2012

- Planned vacation details and swiftly completed flight bookings for clients
- Communicated with tour agencies to send client travel information and confirm bookings