

Experience

Google, Inc. — Software Engineer (11/2014–present)

Built a full-fledged PDF to HTML converter for Google Scholar from the ground up using modern C++11 idioms. Also worked on OCR, data backup, citation counting, and miscellaneous maintenance tasks in C++ and Python.

Google, Inc. — Software Engineering Intern (05/2013–08/2013)

Refactored Google Flight Search logic from Java to C++ and built a pipeline to analyze and optimize its performance.

Facebook, Inc. — Software Engineering Intern (05/2012–08/2012)

Built original version of the **My Apps** page (now **Your Games**). Current version live at <http://facebook.com/games/manage>.

Facebook, Inc — Software Engineering Intern (04/2011–08/2011)

Implemented new API features for Facebook Platform (PHP) and Ads (C++).

Education

Bachelor of Science — University of Toronto, 2014

Double major, physics and chemistry (GPA: 3.96/4).

Achievements

- Top 200, 2013 William Lowell Putnam Mathematical Competition
- 12th place team (University of Waterloo), 2011 ACM-ICPC World Finals
- Silver medal, International Olympiad in Informatics (2010, 2009)
- Silver medal, International Chemistry Olympiad (2010)
- C++ gold badge on Stack Overflow (profile: <http://stackoverflow.com/users/481267/brian>)
- Quora Top Writer 2014–2018

Projects

- PEG Judge (<http://wcipeg.com>) — an online judge for algorithmic contest problems. Includes both a website and a backend server that compiles user-submitted code and uses Unix system calls to sandbox its execution.
- Common algorithms and data structures for the ACM-ICPC (<https://github.com/t3nsor/codebook>)
- PEGWiki (<http://wcipeg.com/wiki>) — a wiki devoted to algorithmic techniques for programming contests

Other skills

- Familiarity with C, JavaScript, PHP, SQL, x86 assembly language
- Experience administering a GNU/Linux server running services such as HTTP, mail, and IRC

The latest version of this document may be found at <http://brianbi.ca/resume>

The HTML version includes hyperlinks.