

# Jeffrey Zhao

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## Education

Sept 2016 – **University of Waterloo**, *Bachelors of Computer Science, Data Science Specialization.*  
April 2021 3.99 GPA, 95% faculty average. In co-op program.

## Experience

May 2018 – **Google**, *Software Engineering Intern.*

- Aug 2018
  - Worked on **Paper Plane**, a project to modularize and simplify C++ code for DisplayAds.
  - Designed and implemented C++ parser for analyzing google3 codebase and underlying call graph of C++ functions. Used Clang ASTs, parallelized with MapReduce.
  - Created internal tools for visualizing Paper Plane code structures, and highlighting Paper Plane predicated functions in Code Search.
  - Technologies involved: C++, Clang AST, MapReduce, Spanner, Colossus, Blaze, Borg, Code Search.

May 2017 – **Wish (ContextLogic Inc.)**, *Software Engineering Intern.*

- Aug 2017
  - Worked on **ProductBoost**, a new impressions bidding platform for merchants.
  - Grew from \$1 M to \$10 M yearly revenue.** Worked in small team of 3 — had high impact.
  - Redesigned product registration user stories and data analytics pipelines from MVP.
  - Created internal tools for gathering statistics, filtering out low-quality bids, and promoting growth.
  - Technologies involved: Python, HTML+CSS+JS, Tornado, Backbone.js, MongoDB, Hadoop.

Dec 2015 – **MasseyHacks I**, *Workshops Director.*

- Feb 2016 Created and oversaw workshops at Canada's first high school hackathon.

## Skills

Programming Algorithms and Data Structures, C++, Python, HTML+CSS+JS, OCaml, PHP, Java, Go,  $\text{\LaTeX}$   
Technologies Linux/UNIX, MapReduce, Clang, Spanner, SQL, MongoDB, Hadoop, Laravel, Backbone.js, Node.js, Tornado, jQuery, Docker

## Awards

2017 **Hack the North**, *Winner.*

Created DoppelGallery, a web app that looks through millions of old paintings for people that look like you. [github.com/descrip/doppelgallery](https://github.com/descrip/doppelgallery)

2015, 2016 **Canadian Computing Olympiad (CCO)**, *Bronze Medal.*

2x bronze medalist. Programming contest for top twenty high school students across Canada, used to select Canada's team for the International Olympiad in Informatics (IOI).

## Projects

2017 **OmongDB**, *C++.*

Developing SQL database written as an on-disk B+tree. [github.com/descrip/omong](https://github.com/descrip/omong)

2016 **Skirmish Online Judge**, *PHP, HTML+CSS+JS, MySQL.*

Online judge web app for programming contests. [github.com/descrip/skirmish](https://github.com/descrip/skirmish)