

# Mattie Graf

## Recent Computer Science Graduate

### Links

Github: [github.com/mattiegraf](https://github.com/mattiegraf)  
Linkedin: [mattiegraf](https://www.linkedin.com/in/mattiegraf/)  
Email: [graf.mattie@gmail.com](mailto:graf.mattie@gmail.com)  
Website: [mattiegraf.github.io](https://mattiegraf.github.io)

### Languages

Proficient: C++, C, Java, JavaScript, TypeScript  
Familiar: SQL, Python, Racket, HTML, CSS, Prolog, Haskell, Erlang

### Frameworks/Tools

Node.js, React, Phaser, UNIX, Linux, JUnit, Git, MySQL, RESTful APIs, Android Studio

### Notable Coursework

Intermediate Algorithm Design and Analysis  
Introduction to Software Engineering  
Computer Hardware and Operating Systems  
Parallel Computation  
Internet Computing  
Introduction to Relational Databases  
Computer Graphics  
Video Game Programming  
Functional and Logic Programming  
Computers and Society (Ethics)

### Education

**University of British Columbia / BSc, Computer Science**  
SEPT 2016 - NOV 2019, VANCOUVER, BC, CANADA

### Projects

#### Task Manager Android App / Java

PERSONAL PROJECT

An android app that provides a place for keeping track of tasks, with a simple organization system that keeps things clear and relevant. Uses a SQLite database to store information locally.

#### Lightbug.io Game / JavaScript, Phaser 2

PERSONAL PROJECT

.io style browser game in which you control a firefly, aiming to survive the allotted time and be the last bug standing. Includes AI decision making, state changing, mouse following, graphical and lighting effects.

#### Reddit to Discord Bot / JavaScript, Node.js, Snoowrap, Discord.js

PERSONAL PROJECT

Monitors a subreddit for new posts and forwards them to a Discord channel asynchronously. Makes calls to the Discord and Reddit APIs. Gracefully handles server downtime by restoring missing posts.

#### Veggie Vengeance Game / C++, OpenGL

TERM PROJECT

A standard, stock fighting game built from the ground up without an engine. Implemented many core mechanics including: the collision system, projectile physics, shared keyboard support, music and playback options, numerous character abilities, hitpoint and stock system.

### Experience

#### Graf Excavating / Office Assistant

APRIL 2019 - PRESENT, NANAIMO, BC, CANADA

Engages in data entry, invoice and statement matching, organizing, filing, and other miscellaneous tasks.

#### Starbucks / Barista

JUNE 2015 - AUG 2016, NANAIMO, BC, CANADA

Assumed a variety of roles including front till, drive thru, bar (drink assembly), and customer support. Partner of the month recipient for August 2016.

#### EB Games / Sales Associate

SEPT 2013 - JULY 2014, NANAIMO, BC, CANADA

Assisted customers in store and over the phone. Maintained sales goals through suggestive selling.

#### 49th Parallel Grocery / Cashier

SEPT 2013 - JULY 2014, NANAIMO, BC, CANADA

Completed customer transactions through Point of Sale. Received mail and completed parcel pickup.