

# William Granados

**Location** Toronto, Canada • **Phone** +1(647) 741-8751 • **Email** me@wgma.ca  
**LinkedIn** linkedin.com/in/wlgranados • **Portfolio** wgma.ca • **Github** github.com/wlgranados

---

## Education

**University of Toronto** 2015 - 2020  
*Candidate Honours BSc, Computer Science and Statistics*

- Courses: Algorithm Design, Data Structures, OS, System Programming, Software Design, HCI, AI, Programming Languages, Compiler Optimization
- Teaching Assistant: Intro to CS I & II (F17-W18), Algorithm Design (F18), Data Structures (W19)

## Extracurricular

- Bronze Medallist, Canadian Computing Olympiad
  - Gold Division, USA Computing Olympiad
  - Honorable mention, East Central NA ICPC
  - Student Coach, ICPC team placing 21st of 130 teams
  - Organizer, algorithms contest **UTSCode**, 150+ users
  - Finalist, 2016 University of Michigan MHacks8
  - 4th Place, UTSC Startup Pitch Competition
- 

## Employment

### Rubikloud

**Toronto, ON**

*Software Engineer Intern - Platform Engineering Team*

*Summer 2018*

- Reduced load time on obsolete tables with 10,000 rows from 1 minute to 3 seconds by paginating data and developing new React & Redux table which supports: resizable columns, locked columns, and infinite scroll
  - Diagnosed and resolved critical front-end bugs in production before release, saving team hours of debugging
  - Wrote UAT and Regression tests for ETL pipeline, and application layer identifying major bugs before new release. Refactored integration test suites for user accounts using Selenium, which identified 2 bugs
- 

## Personal Projects

### LetMeKnow, News Aggregating Website

*November 2017*

- Implemented **multiprocessing** across web queries fetching relevant articles from Reddit API, tweets from Twitter's API, and images from Bing's API reducing load time from 20 seconds per user query to 3 seconds
- Developed core news search utilities using Django for RESTful API management and PostgreSQL for database queries. Managed hosting for website with load balancing through Nginx on a DigitalOcean VPS

### Quadbot, Asynchronous Multiplatform Chat Bot

*Aug 2016*

- Designed a bot for chat interfaces like Discord, supporting asynchronous server-side  $\LaTeX$  compilations, math problem generation, Markov chain generated text, and Steam API integration; Serving 20+ concurrent users
- Automated functional test suite with 60% test coverage on **Travis CI**, and created docker and virtual machine environments enabling simple deployment for developers

### Mobile Waste Wizard, Waste Categorizing Mobile Application

*October 2015*

- Presented MVP to a committee at the City of Toronto in 2 months with weekly sprints, and stand ups
  - Incorporated Google Material Design guidelines to facilitate features for searching (by text, Google voice, and image recognition), tracking recent searches and language search settings
- 

## Open Source Contributions

### PokemonShowdown, Online Pokemon Battle Simulator

*Aug 2017- Present*

- Integrated **emoji filter restriction** to help moderators deal with spam; used by 33% of all public chat rooms
  - Patched bug that allowed blacklisted users to be redirected to their blacklisted rooms by moderators
- 

## Core Technical Skills

**Languages/Markup:** Python, C, C++, Scala, Haskell, Java, Ruby, Bash,  $\LaTeX$ , Javascript, HTML, CSS, XML

**Tools:** Spark, Jupyter, Selenium, React, Redux, Angular, Django, Nginx, Docker, SQL, Linux, Android, LLVM

**Other:** Git, SVN, Mercurial, Jenkins, Travis CI, Agile, TDD, Coverage, Cloud Computing, Vim