

# Filip Francetic

## Software Developer

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### Skills

- Languages: Javascript/Typescript, Python, Java, Bash, PHP, C, C++, Objective-C
- Frameworks and Tools: React, Node, MySQL, PostgreSQL, Angular
- Proficient in iOS and Android development
- Experienced with Linux and Git

### Employment

#### GroupBy Inc.

September–December 2017

Developer for e-commerce product search platform; primarily worked in TypeScript

##### Past Purchase Page.

- Built new page from scratch under short deadlines for interacting with a user's previously purchased items
- Focused on performance by modularizing data, splitting loading between the initial page view and subsequent requests for specific data
- Worked within agile cycle, with rapid and frequent demos

##### Real Time Biasing.

- Led work on a system for personalizing the order of products based on user's browsing habits
- Developed a recommendations system which increases the relevancy of items based on a user's current preferences
- Built in customization to allow per-client configuration of overall impact of personalization on item order

#### Ingle International.

January–April 2017

Internal apps developer, primarily worked in PHP and JavaScript

##### Health Platform Frontend Redesign.

- Redesigned Health Platform using React in order to improve performance and facilitate future development
- Overhauled existing software using functional components

##### Magenta (Third Party) Systems Integration.

- Integrated of third party insurance database into existing systems in order to improve performance
- Wrote robust PHP API for interfacing Ingle software with the third party application
- Led project development on integration project

#### Bronte College.

April–August 2016

- Residence App: Designed an Android app interface to allow students to book residence rooms and manage them (Java, SQLite, and XML)
- User Authentication System: Rebuilt user authentication using JSON Web Tokens to authenticate
- Cafeteria System: Greatly improved performance and on average halved amount of network requests by implementing SQLite database to store previous requests in a local cache

### Projects

#### Cryptocurrency Algorithmic Market-Making.

November 2016–Present

- Designed and implemented Python 3 application to perform market-making on cryptocurrency markets
- Saw average of 8.8% monthly return on investment
- Mathematically determined best ideal parameters for algorithm using robust backtests
- Ran trading application from personally administered Raspberry Pi server

#### C++ Dungeon Crawler.

November 2016

- Created a Rogue-inspired top-down dungeon crawler in C++
- Built a command line interface using ncurses
- Designed map generation, spawn generation, and enemy AI

#### Java Communication Application.

April–June 2015

- Developed client/server messaging modules and UI functionality for a custom-made Webchat in Java
- Designed and styled UI with JavaFX, used RMI as communications API

### Education

**Candidate for Bachelor in Honours Computer Science,**  
*University of Waterloo, Waterloo, Ontario.*

2015–2020

### Other

- Trilingual in English, French, and Serbian
- Huge Super Smash Bros Melee fan
- Devoted Emacs user
- Avid long distance cyclist, loves taking long trips across Toronto