## Spencer M. Fabricant

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#### **OBJECTIVE**

Looking to pursue a challenging position where I can effectively leverage my background in bioinformatics with my experience as a software engineer. Ideally, a problem that would require designing algorithms and systems to solve problems by processing massive stores of data.

#### WORK EXPERIENCE

## Google Inc. (Cambridge, MA, October 2016 to September 2017), Site Reliable Engineer

- Worked on the backend of a system to automate the rollouts of software updates. (C++, python)
- Received and used training in incident management and was a part of their travel/hotel's on-call rotation.

#### Escher Group, Ltd. (Boston, October 2014 to Present), Software Engineer

- Designed and implemented system management and monitoring toolkit for a distributed system of computers. (C#)
- Implemented software to facilitate software installation on a network of computers.
- Worked on Point of Sale software customization

## Ayuda Media System (Montreal, Summer 2013), Software Development Intern

- Worked on stabilization of the Billboard Management System, a company-wide project catered to its clients.
- Merged a third-party partner's additions into the project.
- Became intimately familiar with Chrome's debugging tools
- Included work on the .NET platform, Windows Azure, and some functional programming in LINQ

# Hatfull Labs at University of Pittsburgh (Summer, 2011), Lab Intern and Web Developer

- Associative webmaster for http://phagesdb.org/, a website owned by a laboratory at the University of Pittsburgh
- Managed extensive database of bacteriophage strands
- Created pages dedicated to data processing and graphing utilizing Javascript, DJANGO, Python, SQL, and the Google Maps API.
- See an example at http://phagesdb.org/GPSmap/

#### PERSONAL PROJECTS

## Small projects worth mentioning (2014-2015)

- Markov A simple markov chain generator made with the intended purpose of feeding it Twilight with the entire works of Shakespere just to see what would happen
- MazeBot Procedurally generate mazes
- PixelBot Procedurally generate small pretty pixelated icons
- Project Euler, various problem sets

#### SFSecurity (2014)

- Creator and developer of a smart home security system application that monitors a room via webcam, detects the presence of the user, and alerts the user in case of an intruder via email.
- Written in Java, runs on most platforms.
- Source code can be found at: https://github.com/SpencerFabricant/SFSecurity/

## Code Jam (Fall 2012)

- Created a program that reads from a live stream of stock prices and determines whether to buy or sell at any given moment; all prices and buy/sell points as well as running averages are graphed in real time. At the end of the simulated day, it compiles everything to a .json file.
- Collaborated with a team of four others and saw the project through to completion.
- Written in Java; source code available upon request.

## **EDUCATION**

Bachelor of Science,

McGill University

Montreal, QC

Bachelor of Science, Graduated June 2014

Concentration: Joint Computer Science and Biology

Notable coursework: Computational Biology, Short-read sequence analysis, graphics in OpenGL, vision in OpenCV and Matlab, algorithm design

## UNDERGRADUATE PAPERS

#### COMP-401: Using short-sequence data to reconstruct 16S rDNA

- Created a software package that analyzes short-read sequence data
- Data is pre-processed into a De-Bruijn graph which is then simplified as much as possible and visualized
- Intended to use on the 16S genes of microbiome sample data.

## Computer Vision: Using Shape Context Matching

• Worked with a partner and implemented shape-context matching using OpenCV, and wrote up a full report.

#### COMPUTER SKILLS

Languages & Software: C, C++, (including familiarity with SDL and related libraries), C#, Java, LATEX, jstl and JSP, ASP.NET, SQL, MIPS, Javascript, Python, django, Visual Studio, Eclipse, Fiddler, Araxis Merge

Operating Systems: Windows, Unix



 $<sup>{\</sup>rm ^{0}Online\ PDF\ version:\ http://SpencerFabricant.github.io/spencer-fabricant\_resume.pdf}$ 

 $<sup>^{0}</sup>$ This resume was last updated on 7 Sept. 2017