

Spencer M. Fabricant

260 Norfolk St. Apt #2R. Cambridge, MA 02139
(781) 775-7108
Spencer.Fabricant@gmail.com

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.
-

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 Shakespeare 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.

WorksheetWriter (2011) a

- Creator and developer of a self-contained java executable built to make sets of customized math worksheets, complete with answer keys.
- Web interface can be found at <http://cs.mcgill.ca/~sfabri1/wwriter/>

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

Operating Systems: Windows, Unix



⁰Online PDF version: http://cs.mcgill.ca/~sfabri1/spencer-fabricant_resume.pdf

⁰This resume was last updated on 7 Sept. 2017