

Amittai F. Aviram

60 Gibson Street, Apt. 307, Boston, MA 02122-1250
amittai.aviram@gmail.com 646-483-2639 <http://www.amittai.com>

Experience

Wayfair. Boston, MA. Software Engineer II.

April 2019–present. Sales & Operations Planning Team, implementing logistics analysis and modeling. Completed a project to calculate supply chain estimated times of arrival using multiple data sources in parallel (object-oriented PHP, SQL). Now contributing to the back end of a new, generalized, distributed modeling platform in Python.

Medtronic. Boston, MA. Senior Software Engineer.

September 2016–April 2019. Surgical robotic system research and development lab. Created Simulink real-time logging tools with MATLAB programs that generate C++ code at build time. Collaborated on system integration diagnostic tools and code generation for interprocess communication. (C++, C, MATLAB, Simulink, BASH, CMake, Protocol Buffers, FlatBuffers).

Wentworth Institute of Technology. Boston, MA. Adjunct Instructor.

October 2016–present. Developed and taught [Programming Paradigms and Systems \(CPSC 7050\)](#), an online, intensive, project-driven, 7-week, master's-level course, introducing students to four language paradigms, as well as parallel, distributed, real-time, and embedded systems. Also taught introductory programming in Java.

MathWorks. Natick, MA. Senior Software Engineer.

September 2012–May 2016. Code Generation Intermediate Representation Team, supporting code generation products. Developed tools for ensuring safety and correctness of generated code. (C++, Perl)

Google. New York, NY. Summer Intern.

May–September 2011. Site Reliability Engineering team. Designed and developed a tool to gather and report data on high-latency operations in the distributed storage infrastructure (C++).

Google, Inc. New York, NY. Summer Intern.

May–August 2010. DoubleClick team. Designed and developed an integrated testing infrastructure for their new advertisement tracking tag server (Python).

Ellington Management Group. Old Greenwich, CT. Summer Intern.

May–Aug. 2007. Developed a custom Web services infrastructure, including parser, serializer, asynchronous parallel message handler, deserializer, and CLR IR code generator (C#), together with unit and system tests (C#, Python).

Microsoft Research. Redmond, WA. Summer Intern.

May–August 2006. Designed and developed a demonstration project to infer a context-free grammar from the source code of a hand-written parser, using Microsoft's Phoenix compiler toolkit (C++.Net).

Education

Yale University. PhD, Computer Science.

Dissertation project: Deterministic Parallel OpenMP. Advisor: Bryan Ford.
Co-author, USENIX OSDI Best Paper Award, 2010.

Columbia University. BS, Computer Science.

Theory track. Russell C. Mills Award. Contributed to NLP faculty research project on Arabic morphology.

Yale University. PhD, English Language and Literature.

Columbia University. BA, English and Comparative Literature.

Coursera Certificate

Machine Learning. 9 August 2016.

Previous Career

Associate Professor, English and Comparative Literature,

University of South Carolina, Columbia, SC. August 1984–August 2004.

Research and teaching on poetry and poetics. Mellon Postdoctoral Fellowship, Cornell University, 1986.

Tenure: 1994. Fulbright Senior Scholar, Germany, 2001.

Technical Skills

Programming Languages

C++, Python. Experience in C, C#, Java, Perl, PHP, JavaScript, Haskell, ML, R, BASH, MATLAB,.

Other Technologies

HTML, LaTeX, Dot, SQL. GCC, GDB, Clang/LLVM, XCode, Visual Studio, Eclipse, Vim, CMake, Git.

Operating Systems

Linux, Windows, Mac OS X