STEVEN SPIER

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EDUCATION

State University of New York at Oswego   **Oswego, New York**
Bachelor of Science in Software Engineering   *Graduation: December 2016*

The University of Vermont   **Burlington, Vermont**
Bachelor of Arts in Applied Mathematics   *Graduation: December 2011*

AWARDS

Dean's List, SUNY Oswego   2014

Dean's List, SUNY Oswego   2015

WORK EXPERIENCE

BAE Systems   **Nashua, New Hampshire**
Technical Engineer   *June 2016 – August 2016*
- Updated legacy software algorithms used in radio frequency and geo-location applications by implementing multi-threading in place of sequential solutions, resulting in faster processing of data.
- Coded, debugged, and integrated unit tests for algorithms using JUnit and googletest, providing a more testable baseline.
- Collaborated via daily scrum meetings and assisted interns with technologies including the boost C++ libraries, the Google Test suite, and CMake.

BAE Systems   **Nashua, New Hampshire**
Integrated Test Engineer   *June 2015 – August 2015*
- Converted existing mathematical functions in the baseline from MATLAB to C and C++ by using existing sources and writing new functions, affording more portable and reusable code for other teams.

Vermont Department of Health, IT and Research Statistics   **Burlington, Vermont**
Database Development Assistant   *June 2014 – August 2014*
- Worked in the Health Research Data & Records program.
- Responsible for reviewing and analyzing data from the state's Youth Risk Behavior Surveys from the past decade, and constructing a comprehensive multi-year file using SAS programming.
- Assembled statistical data briefs on topics requested by public officials and private groups.

State University of New York at Oswego   **Oswego, New York**
Computer Science Tutor   *January 2015 – January 2016*
- Helped students in beginning level computer science programming classes achieve greatly.

TECHNICAL SKILLS

Languages   Python, Javascript, Java, Scala, C, C++, Latex, Common Lisp
Tools   Git, Vim, boost, googletest, JUnit, Linux, Windows
IDEs   Intellij IDEA, Visual Studio, Eclipse

RECENT PROJECTS

Project: *Distributed Cluster Consensus*

Implemented a multi-user text processor on a distributed cluster with consensus algorithms. Worked on a class-team using Java, git, and the Atomix framework implementation of the raft protocol as a baseline. Extended the existing algorithms to allow text messages to be sent between nodes, and simultaneous edits to occur, resulting in a consensus fault-tolerant system.

Project: *Plugin Development*

Worked during the summer as part of an independent research team to develop a plugin that implements a Traffic Collision Avoidance System (TCAS) for the Microsoft X-Plane flight simulator application. The plugin was developed in Visual Studio using C and C++, as well as git version control. Wrote the algorithm responsible for taking native datarefs and converting them to usable data to be displayed to the user, generating an accurate and functional interface for the system.