

# Samuel S. Wenninger

[www.linkedin.com/in/swenninger/](http://www.linkedin.com/in/swenninger/)

School Address:  
Blitman Commons Room 3306  
1999 Burdett Ave.  
Troy, NY 12180-3599  
Cell: 413-231-4816

Permanent Address:  
31 Eastwood Circle  
Ludlow, MA 01056  
Email: [wennis@rpi.edu](mailto:wennis@rpi.edu)  
Home: 413-547-6563

<b>Education</b>	<b>Rensselaer Polytechnic Institute (RPI)</b> , Troy, NY Bachelor of Science in Comp. Sys. Engr. & Comp. Sci. (Dual Major) <ul style="list-style-type: none"><li>• Rensselaer Medalist Award</li><li>• Rensselaer Recognition Award</li><li>• Deans List (All Semesters)</li><li>• Junior with Senior status</li></ul> <b>University of Massachusetts Amherst (UMASS)</b> , Amherst, MA <ul style="list-style-type: none"><li>• Physics 1, Physics 2, and Differential Equations</li></ul> <b>Pioneer Valley Christian Academy</b> , Springfield, MA <ul style="list-style-type: none"><li>• Class of 2013 Valedictorian</li><li>• National Honor Society Member</li><li>• Class President (Sophomore and Junior)</li></ul>	December 2016 GPA: 3.76/4.0      Summer 2014 GPA: 4.0/4.0  Spring 2013 GPA: 4.2/4.0
<b>Experience</b>	<b>Intern</b> , Raytheon Integrated Defense Systems, Tewksbury, MA <i>Emulator Team Member in the Software Engineering Directorate</i> <ul style="list-style-type: none"><li>• Analyzed and improved the Patriot Missile System's Emulated Weapons Control Computer performance by 3.5%</li><li>• Effectively used C++, C, Awk, Bash, and IBM Rational ClearCase</li></ul> <b>ALAC Tutor</b> , Rensselaer Polytechnic Institute (RPI), Troy, NY <i>Drop-In Tutor for the Advising and Learning Assistance Center</i> <ul style="list-style-type: none"><li>• Instructing students in Physics 1, Physics 2, Computer Science 1 (Python), and Data Structures (C++) one-on-one</li></ul>	Summer 2015     Fall 2014 - Present
<b>Relevant Coursework</b>	<i>Data Structures (C++)</i> <ul style="list-style-type: none"><li>• Designed and implemented a recursive path finding algorithm to calculate and display the most efficient solutions to "Ricochet Robots" puzzles.</li><li>• Developed a program to manage the physical DVD media inventory of Netflix.</li><li>• Implemented custom data structures such as a Google+ like relationship network.</li><li>• Implemented lossless image compression using perfect hashing.</li></ul> <i>Cryptography &amp; Network Security</i> <ul style="list-style-type: none"><li>• Worked with a 3-person team to develop a C++ asynchronous, socket-based ATM, proxy, and bank system that supports sessions, funds transfers, withdrawals, and deposits.</li><li>• Designed a custom protocol inspired by TLS utilizing RSA encrypted Diffie-Hellman key exchange to establish sessions and AES cipher feedback message encryption.</li><li>• Successfully implemented replay and rogue decryption attacks on another implementation.</li></ul> Comp. Sci. 1 (Python), Comp. Comp. & Op., Fndns. of Comp. Sci., Engr. Graphics & CAD, Physics II, Emb. Control, Intro. to Eng. Design, Intro. to Algorithms, Electric Circuits, Comp. Arch., Nets., & OS, Operating Systems, Prog. Lang., Software Design & Documentation, Speech Com.	
<b>Skills</b>	<i>Proficient:</i> C++, C, Python, UNIX, Vim, Bash, NX 8.5 (CAD), LaTeX, Public Speaking, Leadership <i>Familiar:</i> Awk, Haskell, Erlang, Prolog, IBM Rational ClearCase, HTML, CSS, JavaScript	
<b>Certifications</b>	Secret security clearance	
<b>Interests</b>	Technology, Leadership, Learning, Military Technologies, Innovation	