

# William J. Chen

39 Wilshire Dr. Londonderry, NH 03053  
[chenwill@bu.edu](mailto:chenwill@bu.edu), [will@thewillchen.com](mailto:will@thewillchen.com)  
+1 (603) 657-5506

## EDUCATION

### Bachelor of Science in Computer Engineering, Class of 2018

- Electrical Engineering Minor (planned)
- Concentration in Nanotechnology (planned)

Boston University, Boston, MA

**Honors:** Dean's Scholarship

GPA: 3.09

**Course Highlights:** Introduction to Engineering, Multivariate Calculus, Physics I/II, Engineering Computation++ (Python), Introduction to Software Engineering (C++), Static Mechanics, Electric Circuits, Introduction to Engineering Design

### High School Diploma, June 2014

Londonderry High School, Londonderry, NH

**Honors:** Student of the Month (September 2013), Class Rank 5/406

GPA: 4.47

Principal's Scholarship, New Hampshire Scholar

### Public Speaking Course, May-June 2015

Saint Anselm College, Manchester, NH

**Additional Languages:** Fluent in Spanish and Mandarin Chinese

## TECHNICAL SKILLS

**Advanced Knowledge:** Unix, Microsoft Active Directory, BIND DNS, Site-to-site and roadwarrior VPNs, AAA (Authentication, Authorization, Accounting) services, Network segmentation and policing, IPv6 deployment

**Basic Knowledge:** C#, Python, Assembly, Six-Level Computer Architecture

**Hardware:** Breadboarding, Soldering, Oscilloscopes, Voltmeters, Computer and smartphone/embedded systems repairs

**Operating Systems Experience:** Linux (distros: Gentoo, Arch, Debian and its derivatives, Red Hat and its derivatives, BU Linux, Mac OS X, Microsoft Windows, pfSense (FreeBSD))

## AREAS OF INTEREST

**Internet Security and Performance** - I am interested in systems deployment and penetration testing of robust, yet secure networks and Internet applications, such as DNS, IPSec, 802.1x, and SELinux (for hosts).

**RF Infrastructure** - I am also interested in the development and deployment of wireless technologies (from 802.11 to LTE/GSM) designed to cater to increasingly bandwidth-hungry applications while having a limited amount of spectrum resources. I am particularly interested in embedded systems involving end-user devices.

## EXPERIENCE

**HawkNet Summer Consultant**, Saint Anselm College, Manchester, NH

Jun-Aug 2015

Involved in deployment operations for the college's Computer Replacement Program; created and deployed Microsoft Windows images, and wrote automated installation scripts combined with the Sysprep utility.

## PROJECTS

2014-2015

**Kinect Four** – Created a Connect Four game that could be manipulated with a Natural User Interface using the Kinect v2 sensor for Windows. It was written in C# for my Introduction to Engineering course.

**Elliptic Curve Cryptography** – A proof-of-concept implementation of elliptic curve cryptography, built from the ground up without the OpenSSL library. It was written in Python for the Engineering Computation++ course project. Amongst my teammates, I was responsible for frontend development.

Available at [github.com/bchen88c/ek128-project](https://github.com/bchen88c/ek128-project)

### Personal Cloud Service Deployment and Management

- One domain, with three servers spanning two continents, connected to each other via an open-source IPsec VPN solution (strongSwan)
  - US-Boston University server providing 4TB of high-bandwidth storage with redundancy provided by unlimited Google Drive storage (via Google Apps for Education). Powered by **Fedora** Server.
  - US-Londonderry, NH server providing Active Directory Controller, BIND DNS, and Kerberos authentication services to family-owned devices. Powered by **Gentoo** Linux.
  - UK-Linode VPS providing external web services and geographic diversity. Powered by **Gentoo** Linux.
  - The network is accessible by remote clients via IPsec or OpenVPN tunnels to any server.

## LEADERSHIP

**Boston University College of Engineering**, Boston, MA

2015 – present

Dean's Host – Professionally represent the College of Engineering to prospective students and families. Participated in weekly Open Houses in April 2015 to engage BU acceptees and their parents.

**Boston University Rocket Propulsion Group (BURPG)**, Boston, MA

2015 – present

Avionic Systems Team - Currently exploring the software that powers BURPG's custom PCBs, Hermes and Kronos, both of which are used in the next-generation Starscraper rocket.

**Society of Asian Scientists and Engineers (SASE)**, Boston, MA

2014 – present

Advertising Planning Committee Member – Provided advertising strategies for the organization's Northeast Regional Conference in February. About 250 SASE members from dozens of schools attended this professional networking event.

**Londonderry High School**, International Club, Londonderry, NH

2012 - 2014

Secretary – Organized board and club meetings, prepared advertisements for annual International Night and recycling fundraiser.

Publicist – Reached out to local newspapers and sponsors to help support and spread the word about the club's International Night.