

**SKILLS:**

**Proficient Languages:** Swift, Objective-C, C, PostgreSQL

- Experience with Java, Python, C++, bash scripting
- Exposure to node.js, goLang and C#

**Frameworks/APIs:** iOS SDK, Java Spring, Nordic NRF SDK, Arduino

**Platforms:** Mac OSX, Windows, Linux

**Tools:** Xcode, Eclipse, Vim, git, DBeaver, Linux CLI, Arduino Studio

- Hobby level experience with Blender, Unity3D, MIDI and basic circuit design

**WORK EXPERIENCE:**

**Saucon Technologies** March 2011 – Present

- Developed and maintain over 25 remote data driven apps on iOS App Store, approaching 500k downloads worldwide, as well as niche implementations for Enterprise clients
- Apps cover various target areas including interactive maps, video, real-time transit schedules, and commercial electronic driver logs taking advantage of features such as Bluetooth interaction, background execution, and multi-threaded implementations
- Extensive data pipelining within apps via HTTP, MQTT, UDP, and BLE protocols to traditional web servers, queues, and embedded devices
- Back-end server work including but not limited to RESTful web service development in Java via Spring, DB maintenance scripts in Python, database research and debugging in PGAdmin/DBeaver
- Firmware development on custom hardware running Nordic nRF52 and nRF51 SoCs, Atmel C21 and D21s
- Maintain OpenWRT fork for a product that utilizes extensive bash scripting running on consumer hardware, powered by custom power management hardware

**INDEPENDENT PROJECTS:**

**Chromovis**

- Designed, implemented and released a puzzle game for the iPhone, iPad and iPod Touch platforms that was available on Apple App Store until 2015

**Musical Synthesizer**

- On going design and implementation of a digitally controlled analog signal path musical synthesizer controllable by MIDI via an Arduino

**RESEARCH:**

Akshaye Dhawan, Neal Shukla, Cassandra Chapman, Stephan Hennion, “*Fault-Tolerant Clustering in Dense Wireless Sensor Networks*”, In 2<sup>nd</sup> International Workshop on Advances in Networking and Computing (**WANC'11**), Osaka, Japan, November 2011

**ACHIEVEMENTS:**

Perfect Quantitative Score on Graduate Record Examination (GRE), October 2010

**EDUCATION:**

Syracuse University,

**M.S., Computer Science** *In Progress*

4.0 GPA after 4/10 classes completed

Began January 2018, targeted June 2020 graduation date

Ursinus College,

**B.S. in Computer Science and Mathematics** May 2010