

Introduction

I currently for Arbor Networks as a Software Engineer working on Internal Tools and Infrastructure, with Python as my primary programming language. I have a background working with a wide variety of technologies and languages, some of which are listed below.

Education

- **University of Michigan** Ann Arbor, MI
M.S. in Electrical Engineering:Systems Aug 2009 - May 2011
- **BITS Pilani** Goa, India
B.E. (Hons.) in Electrical and Electronics Engineering Aug 2005 - May 2009

Experience

- **Software Engineer, Internal Tools and Infrastructure** Ann Arbor, MI
Arbor Networks January 2017 - present
 - Move several old applications from traditional server-heavy setups to ones running as hosted containers using Docker
 - Work on design and development of different tools from simple command line tools to API-first web applications for internal usage within Arbor
 - Deployment and management for ~100 services and servers used for development, testing, and customer service
- **QA Engineer, Network Security Product Testing** Ann Arbor, MI
Arbor Networks June 2011 - Dec 2016
 - Worked on writing regression tests for the hardware and software components of Arbor's Peakflow TMS product for DDoS prevention
 - Worked on understand and testing the behaviours and quirks of different protocols used over the Internet including IP, TCP, UDP, DNS, HTTP, BGP, etc.
 - Wrote a large part of the automated testing framework for Arbor's Peakflow SP Mobile Network Analysis product
 - Automated UI testing and manual end-to-end testing for Arbor's Pravail product
- **Automotive Component Inspection Systems** Ann Arbor, MI
NSF Engineering Research Center for Reconfigurable Manufacturing Systems Sept 2009 - May 2011
 - Worked on automated inspection of automotive electrical components using image processing algorithms
 - Designed and built a reconfigurable system for crankshaft inspection which was reviewed by an automotive component manufacturer for incorporation into their assembly line
- **Soft Wi-Fi** Ann Arbor, MI
EECS Department, University of Michigan May 2010 - August 2010
 - Worked on the design and implementation of a multi-channel opportunistic modification to the MAC layer of the 802.11 protocol using Microsoft Research's SORA academic kit
- **Investigation and implementation of pitch detection algorithms** Bangalore, India
Multimedia Codec Centre, Nokia Research Jan 2009 - May 2009
 - Read a lot of research papers, and adapted some of them to write Python modules for pitch contour tracking and analysis

Skills

Languages: {Python, L^AT_EX} (proficient), {Shell, C, SQL, HTML/CSS} (comfortable), Javascript (learning)

Operating Systems: Linux (Debian/Fedora based distributions, Gentoo), MacOS, Windows

Tools & Frameworks: (*commonly used*) Emacs, Docker, Selenium, Django, PostgreSQL, Ansible, Git