

## EDUCATION

### VIRGINIA TECH

BS in Computer Science

Minor in Mathematics

May 2014 | Blacksburg, VA

Focus in Human Computer Interaction

College of Engineering

## LINKS

Github:// [wilcollins](#)

LinkedIn:// [wilcollinsVT](#)

StackOverflow:// [wilco](#)

## COURSEWORK

Creative Computing

Computer Systems

Cryptography

Database Management Systems

Human Computer Interaction (*Research Asst.*)

Mobile Development for Android

Multimedia, Hypertext, & Information Access

Theory of Data & Algorithm Analysis

## VOLUNTEER

### VT BUS TRACKER

UX Design & Development

September 2011 - December 2011

- Redesign UX
- RESTful API development

## SKILLS

### Proficient:

Java • JavaScript • Node.js • Docker  
SQL • NoSQL • Bash • Git • Jenkins  
AWS • Terraform • Packer • Ansible

### Experienced:

Python • Ruby • Swift • Android • PHP  
C • C++ • Django • ML • ETL •  $\LaTeX$   
TCP/IP • DNS • SMTP • MQTT  
VMware • Mongo • Redis • GCP

## AWARDS & RECOGNITION

2012 VTWK Entrepreneur Challenge Finalist  
2015 IBM Manager's Choice Q3  
2016 IBM Manager's Choice Q1  
2016 IBM Manager's Choice Q3  
2016 IBM Watson IoT Contest Finalist

## EXPERIENCE

### AGARI DATA, INC. | Quality Automation Engineer

November 2016 - May 2017 | San Mateo, CA

- Build Docker network for local replica of near real-time email pipeline hosted on AWS
- Build end-to-end Java test harness utilizing the local Docker pipeline for black-box testing
- Build fully codified Jenkins system on AWS using Ansible & Terraform
- Created more than 50% cost savings for Jenkins using AWS Spot Instances for slaves
- Develop performance metrics and dashboard to help meet pipeline SLA

### IBM | Staff Software Engineer

June 2016 - November 2016 | San Francisco, CA

- Lead continuous integration of mobile project
- Develop multi-threaded automation framework for stable & reliable GUI testing
- Manage customer delivery of framework & support customer installations of application
- Develop bulk data loading apps to reduce load times by more than 50%
- Build a robot interfacing with the IBM Watson IoT API
  - Natural language classifier, voice-to-text, & text-to-voice
  - Node.js command-and-control server with iOS Swift client app

### IBM | Software Engineer

June 2014 - May 2016 | San Francisco, CA

- Lead design & development of Appium-based mobile automation framework
- Design & implement application layer of web framework
  - Improve time-to-value by reducing development by more than 50%
- Improve automated data import process by 10x speed
- Design & implement implicit wait algorithm for 10x speed improvement
- Automate multiple manual workflow processes to drive team agility
- Create & manage application environments, including:
  - Linux(RHEL) & Windows servers
  - WebSphere & Tomcat app servers
  - MS SQL, Oracle, DB2, & MySQL databases

### IBM | Software Engineer Intern

June 2013 - December 2013 | San Ramon, CA

- Develop Selenium-based automation framework for QA regression testing
- Develop automated test suite totaling more than 200 test cases
- Build automation lab of virtual machines for remote automated testing

### VT SOFTWARE TECHNOLOGIES LAB | Developer

September 2012 - May 2013 | Blacksburg, VA

- Implement customized web applications
- Upgrade and maintain existing database systems
- Redesign existing user interfaces to increase product usability

### THE CARTEL | Mobile & Web Developer

May 2012 - May 2013 | Los Angeles, CA

- Design and develop mobile applications for iOS and Android
- Design and develop websites for clients

### HANDSHAKE MEDIA | Mobile & Web Developer

October 2011 - May 2012 | Blacksburg, VA

- Develop mobile applications for iOS and Android
- Develop a web application using the Django Python framework
- Finalist in the VT KnowledgeWorks Entrepreneurship Challenge

## RESEARCH

### VIRGINIA TECH | Undergraduate Research

January 2011 - May 2012 | Blacksburg, VA

- Develop a distributed game with different versions to understand the effect of visible information & information security on user interactions
- Assist with data collection and management during experimental sessions