# Tyler S. Roesler Software Engineer (727) 560-2857

# Troesler95@gmail.com 41 Eagle Street, Fredonia, NY 14063

**OBJECTIVE**: To obtain a full-time position in the design, development, and implementation of computer software. Available December 2017.

EDUCATION: State University of New York at Fredonia

**Bachelor of Science in Computer Science** 

In-Major GPA: 3.74 Overall GPA: 3.48 Fredonia, NY Expected Fall 2017

#### PROJECTS:

- Worked in a small team to develop algorithms to segment American standard traffic signs from an image and classify
  them using a Deep Neural Network in Python3 using Keras, OpenCV, and Anaconda. Accompanied by significant
  research in the fields of computer vision and machine learning.
- Team leader for BookOrder, a Rails based web application to aid teachers in ordering books for the following school year. Included research into consumer need and followed closely with the MVC software architecture.
- Individually developed a Huffman Encoding compression program in C++ using hierarchical trees, bit manipulation, and file I/O.
- Individually implemented many Data Structures including Linked Lists (C++) and Binary Search, a Binary Search Tree (Java), and a Heap data structure including the Quicksort and Mergesort sorting algorithms (Ruby).

### COURSEWORK:

**In Progress:** Intro to AI and Knowledge Engineering, Senior Project, Assembly Language and Computer Organization, Intro to Operating Systems, Software Engineering, College Physics

**Complete**: Relational and Object Databases, Paradigms of Programming Languages, Digital Image Processing and Machine Vision, Data Structures, Systems Programming, Mobile Aesthetic Design, Discrete Mathematics for Computer Science I and II,

Computer Security and Ethics, Problem Solving Using Objects Survey of Calculus I and II., Web Programming I and II

### SKILLS: Programming Languages: C++, Python, Ruby, C#.NET, Java, Octave (MATLAB).

Web Technologies: HTML5, CSS/SCSS, JavaScript/JQuery, Rails and MVC, PHP, SQL (MySQL, Oracle, SQL Server)

Operating Systems: Unix/Linux (Debian), MS Windows, Mac OS.

**Development Technologies:** Git/Github, Jetbrains IDEs, Microsoft Visual Studio, Vim/Nano, Bash/C Shell, Android Studio, OpenCV3, Oracle VM VirtualBox, Atom, Anaconda, Windows Presentation Foundation and MVVM, Microsoft Office Suite, Adobe Photoshop

**Other:** Machine Learning and Computer Vision principles, UX and UI design, experience in Flat-UI and Google Material Design, Microcontroller/systems development (RPI/Arduino), strong image processing skills

**Traits:** Constantly produce work beyond the base requirements, quick learner who can produce results, strong communication skills both written and oral, excited and motivated employee

### **EXPERIENCE:** Ortho Clinical Diagnostics - Rochester, NY

### Prototype Applications Developer Intern, Summer 2017

- Developed working models of the product in question from the basic hardware to the complex software and graphical user interface
- Observed and participated in the entire software and product development lifecycles, starting early Phase I of a new
  project and aiding in its development leading into Phase II. Included experience developing various design documentation
- Developed and honed skills in several technologies including:
  - Raspberry PI Linux development using Python and the RPi.GPIO library to develop the software to drive the hardware subsystem. Included learning and developing embedded hardware systems
  - C#.NET development (WPF and WinForms) to leverage the existing WinForm application into a design with concern for user experience design and voice of the customer requirements
  - o Aided in the development of the software module in charge of processing images using MATLAB

# Customer Service 2011-2017

6+ years of customer service experience allows me the skills necessary to always put the end user first in any project

# ACTIVITIES: Computer Science Club - SUNY Fredonia

# President, Spring-Fall 2017

- Make executive decisions and hold all responsibilities for the Computer Science Club
- Establish the club as a learning resource for students through facilitation of student and faculty based talks and other activities to engage students in computer science as a discipline

### **ACM Competitive Coding Competitions**

### Team Member, Spring-Fall 2017

• Practice problem solving under significant pressures as well as working and collaborating in a team based environment

### AWARDS:

- Dean's List, State University of New York at Fredonia, 2015-2017
- Phi Theta Kappa Induction, Spring 2014
- Chautauqua Region Community Foundation Scholarships, 2013

### SOCIAL:

- LinkedIn: linkedin.com/in/tylerroesler
- Github: github.com/troesler95