

# Tyler S. Roesler

Software Engineer

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[LinkedIn.com/in/TylerRoesler](https://www.linkedin.com/in/TylerRoesler) | [GitHub.com/Troesler95](https://github.com/Troesler95) | [Troesler95.GitHub.io](https://Troesler95.GitHub.io)

## SKILLS:

**Languages:** C/C++ and the STL, C#.NET, Python, Octave (MATLAB), Ruby, Java

**Web:** HTML5, CSS/SCSS, JavaScript/jQuery, Rails, PHP, SQL (MySQL, Oracle)

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

**Development Technologies:** Git/GitHub, Subversion, OpenCV, Anaconda, Windows Presentation Foundation, Microsoft SQL Server and Entity Framework, UML

**Concepts:** Software design patterns, Software design architectures, Scrum/Agile, Waterfall, and XP methodologies, OOP, Multi-threaded programming, GUI development strategies, UI and UX design principles

## EDUCATION:

**B.S. in Computer Science**

*State University of New York at Fredonia*

**Expected December 2017**

*In-Major GPA: 3.74*

### Specialized Coursework:

Intro to AI and Knowledge Engineering, Senior Project, Assembly Language and Computer Organization, Intro to Operating Systems, Software Engineering, Relational and Object Databases, Digital Image Processing and Machine Vision, Mobile Aesthetic Design

## EXPERIENCE:

### Prototype Applications Developer Intern

**Summer 2017**

*Ortho Clinical Diagnostics*

*Rochester, NY*

- Researched, implemented, and tested several Bayer-format image demosaicing techniques and their impact on image processing and machine learning tasks
- Developed a server-client software system for the interaction between an embedded micro-controller and a Windows system
  - The client application was written in C#.NET and WPF with concern for UX/UI design principles and VOC requirements
  - The server system was written in Python
- Designed and implemented a locally-based MS SQL Server for use with the WPF application utilizing Entity Framework and a generic DAL
- Observed and participated in the entire software and product development lifecycles

### Teacher Assistant and Lab Proctorship

**Fall 2017**

*State University of New York at Fredonia*

*Fredonia, NY*

- Aide professors in giving meaningful feedback to students through code reviews and office hours
- Lecture courses in the absence of the professor
- Hold responsibility for the operation of the Computer Science Department computer lab
- Help students in the completion of coursework or other technology related questions or problems

## PROJECTS:

### Feedback Control System for Autonomous Flight Tasks with Drones

**Fall 2017**

*Technologies/Concepts: MATLAB, Simulink, Embedded C (Linux), Control Theory*

### Maze Solving Application Using Artificial Intelligence

**Fall 2017**

*Technologies/Concepts: C++ and STL, Windows API, Artificial Intelligence, Heuristic*

### Traffic Sign Recognition System Using a Deep Neural Network

**Spring 2017**

*Technologies/Concepts: Python, OpenCV, Keras, Machine Learning, Image Processing*

### BookOrder Web Application

**Spring 2017**

*Technologies/Concept: Ruby on Rails, HTML/CSS/JavaScript, MySQL, User Accounts*

## ACTIVITIES:

### President of Computer Science Club - SUNY Fredonia

**Spring 2016 - Fall 2017**

- Engage over 70 majors and non-majors in the computer sciences through technology talks and workshops

### ACM Competitive Coding Competitions

**Spring 2016 - Fall 2017**

- Apply computer science and mathematical skills under significant pressures