# William Cromar

# Skills and Technologies

Languages: Java, Python, C, C++, Octave, SQL, HTML/CSS, LaTeX Operating Systems: Linux (including Bash command line), Windows 7/8/10 Development Tools: Jupyter, Git, Subversion (SVN), MS Visual Studio, CMake

Libraries: Scikit-Learn, TensorFlow, NumPy, NLTK, Seaborn

### Education

#### **University of Central Florida**

Fall 2015 - Spring 2019 (expected)
Current GPA 3.9

Bachelor of Science, Computer Science

Minor: Statistics Burnett Honors College

#### St. Johns River State College

Fall 2013 - Spring 2015 Final GPA: 3.9

Computer Programming and Analysis

## Experience

### **Member, JV Programming Team (UCF)**

September 2016 - May 2017

- Attend weekly practice competitions to improve problem solving skills and programming ability. Implement efficient software solutions in **Java** within a short time-frame.
- Collaborate and communicate with other team members to design and implement creative solutions to challenging problems. Test solutions to ensure correctness.

#### Software Engineer Intern (DiSTI)

October 2015 - September 2016

- Developed and maintained leading-edge virtual environment software written in **C++**. Identified, reported, and resolved bugs in a large code-base.
- Tested software solutions and reviewed code written by team members to ensure consistent software quality. Created and improved automated tests using in-house tools, as well as custom Python scripts.

Projects github.com/will-cromar

**Sentiment Classifier:** Developed a natural language sentiment classifier in **Python** using **sklearn**, capable of identifying positive or negative tone in bodies of text. Trained using real-world natural language data, preprocessed with **NLTK**. Incorporated sentiment classifier into larger group project providing stock market news analysis, price prediction, and report generation.

**Connect-4 AI:** Implemented an automated *Connect-4* player from scratch in **C**. Incorporates probabalistic methods such as Monte-Carlo Search Trees, as well as heuristic techniques from game theory to efficiently achieve near-optimal play.

**PL/0 Compiler:** Collaborated with a team of two other people to implement, in **C**, a compiler for the PL/0 programming language. Capable of lexing, parsing, and generating bytecode for PL/0 source files. Implemented virtual machine to test generated bytecode.

**Text Editor:** Developed a basic graphical plain-text editor in **Java** using the **Swing** framework, capable of reading and writing to text files. Constructed UML class diagram to document object relationships.