

## Joshua C. Baroni

Address: 7216 Farr St., Annandale, VA 22003  
Email: joshua.baroni.16@cnu.edu  
Cell: 571 389 2922  
Home: 703 941 3054  
Linkedin: <https://www.linkedin.com/in/joshua-baroni-b50580177>  
Github: <https://github.com/joshuabaroni/>  
Portfolio Website: <https://joshuabaroni.github.io/> (under construction)

## Education

**Christopher Newport University**, Newport News, VA

*Class of 2020*

**B.S. Computer Science**; Minor in Leadership Studies

*GPA: 3.02*

### Major-Relative Courses Completed:

- Operating Systems (CPSC410)
- Regression Analysis (STAT342, Korea University Study Abroad in Seoul)
- Data Structures and Algorithms (CPSC270, CPSC420)
- Intro to Robotics (CPSC472)
- Cybersecurity (CPSC427)
- Deep Learning (COSE474, Korea University Study Abroad in Seoul)

**Trinity Christian School** (High School)

*2016, Cum Laude*

## Software Development-Related Jobs/Internships

**Automatic Data Processing (OneADP Norfolk, VA), Global Product and Technology**

*Summer Intern 2019*

- Work with Optical Character Recognition (OCR) AI to read documents
  - Exposure to constructing basic deep learning algorithms to classify OCR'ed documents based on context (State of origin, type of document, location, etc.)
  - Developed in an intern-led Agile development team
  - OCR Engines used:
    - Tesseract (Open-source OCR Engine on github)
    - OpenText Captiva
- Full Stack Development -> created REST API calls and used spring GUI template for OCR
  - Apache Kafka for callbacks between OCR Framework and Business Process Management Orchestrator
  - Built REST backend calls around AlfrescoDB - All documents stored on AlfrescoDB
- Helped to construct backend framework between OCR, AI, and UI for ADP's Automated Payroll account creation application
  - Spring Framework for rest calls
  - MVC model for OCR REST API Backend
  - Primary tools: Java (org.springframework), JavaScript Object Notation (JSON), Python (For AI/Document Categorization)
- Modified pieces of tesseract OCR engine with C++ to suit ADP's specific requirements
  - Wrote PDF to Tiff image conversion system to allow Tesseract to support PDF documents (this is on my github; I built it for another project and reused it for ADP's OCR Framework!)

**Parsons Corporation (Centreville, VA)**

*Summer Intern 2017*

- JUnit (Java) and Boost (C++) testing for first half of internship for previous Parsons contract
  - Moved to another contract after the first was finished and documented
  - Worked heavily with Linux and Shell Scripting
  - Developed using the Agile development methodology - SCRUM
- Second project codebase was C++, with usage of a third-party data transfer library called Redis
  - Redis functioned as a more efficient substitute for socket connections within the project
  - Worked with CMake and Python Scripting
- \*\*I regret that I am not permitted to share more specific details due to Parsons' non-disclosure policy for past and current employees

## Skills

### Most Comfortable Programming Languages:

- **Java** (2 years hands-on internship/project experience, backend/application development, WEKA machine learning algorithms)
- **Python** (1 year hands-on internship/project experience, application/scripting/machine learning)
- **JS** (1 year capstone and personal project experience, full-stack)
- **Other Languages** (Less than 1yr experience): HTML/CSS, C#, C/C++

**OS/Software** (Bold indicate most experience/comfort): **Linux Ubuntu/Kali/Mint**, Mac, **Windows 7/8/10**, CentOS, **Maven**, Gradle, Jenkins, Docker, **Spring Framework**, ROS (Robotic Operating System), Kafka, AWS, Redis, **PyTorch**

## Outside of Work: Leadership Roles and Hobbies

- Food Pantry Volunteer Columbia Baptist Church
- Reformed University Fellowship (RUF) Worship Team, Student Outreach Team
- Chamber Choir at CNU
- CNU Overwatch eSports Team (Tespa Collegiate Series)