

Brandon C. Townsend

Located in NC. [LinkedIn](#). [GitHub](#).

Available for phone interview with 24 – 48 hours of notice

Available to join immediately

Education:

- B.S. COMPUTER SCIENCE, Western Carolina University, 2019, 3.86 GPA
- B.S. APPLIED MATHEMATICS, Western Carolina University, 2019, 3.72 GPA
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Qualification Summary:

- Recent graduate from Western Carolina University looking for software developer opportunities. I have a background in Java and Python and am currently receiving training in full-stack development through the Cognixia JUMP program. I'm a natural problem solver and am eager to expand my knowledge base and provide my experiences to your team.

Technology & Tools:

- Methodology: Agile/Scrum
- Collaboration: Proficient in Git/GitHub
- Architectures/Frameworks: Bootstrap, Apache Tomcat, Pygame
- Languages: Fluent in Java. Proficient in Python; Bash. Prior Experience in Javascript; C.
- Platforms: Fluent in Linux/Unix; Windows

Professional Experience:

NC State University, Raleigh, NC

May 2019- Aug 2019

Undergraduate Research Assistant

- Achieved a solution to generate coding exercises for novice programmers in Python in 10-weeks.
- Presented on both technical and nontechnical topics to groups of 30+ fellow research assistants, graduate students, and faculty members.
- Analyzed academic articles in weekly meetings alongside graduate students and faculty members.
- Presented a poster during the NC State Undergraduate Research & Creativity Symposium.

Western Carolina University, Cullowhee, NC

Aug 2017- May 2019

Computer Science Teaching Assistant

- Assisted in weekly 2-3 hour lab work sections, multiple times per week, in Java and Python courses.
- Participated in their class exercises, in which I would provide feedback and grade their algorithmic solutions to problems presented by teachers.
- Led tutoring sessions for groups of students and gave focused tutoring on core Java, such as Object-Oriented Principles (OOP), data structures, and loops, Python syntax, data structures, and loops, and the Bash command line.

Personal Projects:

Ant Colony Optimization

- Programmed an example of swarm intelligence ML to search a graph for an optimal shortest-path.
- Constructed GUI using Pygame; users may construct their own graphs and assign vertices attributes.

JUMP Full-stack Project

- Led team of four in creating a full-stack software solution which simulated a library application.
- Used HTML5 with JSP, CSS with Bootstrap, and Javascript to produce a web-page as front-end.
- Used Apache Tomcat to connect front-end forms to the MySQL database.

NEAT Algorithm

- Java program that teaches neural networks to play 'Frogger'.
- Made use of Java built-in data structures: arraylists, hash maps, and streams.
- Gave presentations on the topics of neural networks and genetic algorithms to fellow students and 5+ faculty members.
- Constructed over the course of two semesters; first semester was in a team of two, second semester was individual.