

# Aishwarya Srivastava

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**Immigration Status:** Indian citizen on F1 (Student) visa. Eligible for CPT/OPT (1 year + 2 year STEM extension).

## Education

**The Ohio State University, Columbus OH - (GPA 3.7/4.0)**

**May 2018**

- BS in computer science and engineering and math minor with *magna cum laude* honors.
- Received the College of Engineering Undergraduate Research Scholarship in December, 2017.
- **Relevant coursework:** AI, Databases, Web Applications, Game Design, Combinatorial Math, Statistics and Probability.

## Skills

**Languages:** Python, C#, Java, C, C++, SQL, Ruby, JavaScript, Go

**Tools:** Eclipse, Git, Unity, Visual Studio

**Web Development:** Ruby on Rails, HTML, CSS, Bootstrap

## Experience

**Undergraduate Research Assistant - OSU Department of Astronomy**

**May 2017 - Present**

- Working under Dr. Annika Peter to find indirect mass estimation methods dark matter halos in the  $10^7 - 10^{10} M_{\odot}$  range.
- Using Python's SQLite library for data modeling and Matplotlib and NumPy libraries to create automation tools to investigate over 7 million halos for empirical relationship between halo mass and satellite kinematics.
- Project sponsored by NASA and the National Science Foundation. Presented results at various UG research forums.

**Academic Tutor - OSU Student-Athlete Services Office**

**Jan 2017 - Oct 2017**

- Tutored 4 student-athletes per week in pre-algebra, calculus I and II, introductory physics, and Java programming.
- Assisted with take-home assignments and preparation for exams, and reviewed graded assignments to assess progress.
- Regularly reported to coordinators regarding details of individual meetings and overall progress.

**Summer Immersion Program Instructor - Girls Who Code, Austin TX**

**Jun 2016 - Aug 2016**

- Taught 20+ high school girls introductory computer science through software development in Python, firmware programming in Arduino, and web applications with HTML, CSS, JavaScript, Bootstrap, and web APIs.
- Assisted in lesson planning and delivery, assignments, equipment management, field trips, and classroom logistics.
- Communicated regularly with program coordinators regarding the progress of the curriculum and students.

## Projects

**Adventure Game - C# (Unity 3D, Visual Studio)**

**Spring 2018**

Worked with 6 developers using the scrum framework to develop a first-person adventure game, with interactive AI agents as NPCs, characters with scripted animation controllers, and stealth, strategy, and inventory mechanisms.

**Core Interpreter - Python**

**Spring 2018**

Implemented an interpreter which uses recursive-descent parsing and object oriented programming to tokenize input program using a finite state automata, and performs execution, error handling, and printing.

**MariO - Java**

**Fall 2017**

Implemented an AI agent for Mario using the SARSA reinforcement learning algorithm, and recorded performance analytics over time using multiple metrics.

**Camp Roster - Ruby on Rails, HTML, CSS, JavaScript, Bootstrap**

**Fall 2017**

Created a CRUD application using the MVC architecture with a database integrated GUI and features like camp registration, waitlisting, a login mechanism (with email authentication) and a user dashboard.

**Remote Shell - C**

**Fall 2016**

Developed a malware using socket programming that can access files on a targeted system.

**Tag Cloud Generator - Java, HTML**

**Fall 2015**

Built a program to generate a tag cloud web page using Java Collections Framework and file I/O components, with checks for input validity and I/O exception handlers using the try-catch construct.