

JUSTIN SANTOS

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EDUCATION

MASTER'S DEGREE — THE UNIVERSITY OF OKLAHOMA | NORMAN, OK

Aug 2020 – Expected May 2021

- Master of Science in Computer Science
- 4.00/4.00 GPA

BACHELOR'S DEGREE — THE UNIVERSITY OF OKLAHOMA | NORMAN, OK

Aug 2017 - May 2020

- Bachelor of Science in Computer Science with a Minor in Mathematics
- Summa Cum Laude
- 3.91/4.00 GPA

SKILLS

- **PROGRAMMING LANGUAGES:** C, C++, C#, Java, Python, R, HTML, CSS (SASS), JavaScript, SQL
- **TECHNOLOGIES:** Git, Jira, Confluence, Maven, Flask, Selenium, ROS, Unity, LaTeX
- **MISCELLANEOUS:** RESTful architectures, model-view-controller (MVC), AI/ML fundamentals

EXPERIENCE

SOFTWARE ENGINEER IN TEST, INSTITUTIONAL SHAREHOLDER SERVICES | NORMAN, OK

2020 - Present

- Developed automated regression tests using Selenium in Java to evaluate the performance of a flagship web application.
- Modified the existing automation framework to fit new testing requirements.
- Formulated and performed functional testing for new application releases.

TECH TEACHER, KENNEDY TECH TEACHERS | NORMAN, OK

2019 - 2020

- Taught weekly lessons in various STEM-related topics, such as binary arithmetic, animal bone structures, and 3-D printing to fourth and fifth graders at a local elementary school.
- Collaborated with teachers at the elementary school to procure a sound lesson plan.

PROJECTS

[SORTING ALGORITHM VISUALIZATION](#)

- Designed and constructed a command-line Python program to aid in the visualization of sorting algorithms by randomizing a user-input image and outputting a video of the resorting process.
- Implemented several sorting algorithms such as quicksort, insertion sort, and bubble sort.

[BIRDS HATE BOMBS](#)

- Built an infinite runner game created using the Unity game engine where the player controls a flying bird trying to avoid levitating bombs.
- Wrote scripts for game mechanics and character control in C#.
- Submitted to the Fall 2019 Game Jam hosted by OU's Game Developers Association.

[HONORS RESEARCH PROJECT – QUADRATIC SIEVE ALGORITHM](#)

- Conducted a self-learning research project with the assistance of Dr. Qi Cheng from OU about the quadratic sieve integer factorization algorithm.
- Implemented the algorithm from scratch using Python with the capability to find the prime factors of a 21-digit number (quintillions) in less than 1 minute using an Intel i7-8750H, 2.2GHz CPU.

[WEBSITE FOR OU'S FILIPINO STUDENT ASSOCIATION](#)

- Established and maintained an informative website for the Filipino Student Association.
- Utilized HTML, SASS, and JavaScript for the creation, and deployed using GitHub Pages.

[HACKLAHOMA 2020](#)

- Participated in a 24-hour hackathon hosted by OU.
- Designed and created a visualization tool for maze generation and maze solving algorithms using HTML, CSS, and JavaScript.
- Implemented a JavaScript backend with custom graph and node data structures to facilitate maze generation and traversal functions.