

# Josue N. Rivera

14 CROSBY ST. APT. 1 | LAWRENCE, MA 01843 | (978) 201 - 7801 | [josue.n.rivera@outlook.com](mailto:josue.n.rivera@outlook.com)  
 LinkedIn: <https://www.linkedin.com/in/josue-n-rivera/> | Portfolio Site: <https://josuenrivera.site>

## EDUCATION

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- Master of Science** | University of Massachusetts Dartmouth – Dartmouth, MA May 2020
- Concentration: Computer Science
  - Courses Taken or Taking: Algorithms and Complexity;
  - Courses Expected: Theoretical Computer Science; Advanced Computer Systems; Advance Data Mining.
- Bachelor** | University of Massachusetts Dartmouth December 2019
- Major: Computer Science | GPA: 3.95
  - Honors, Leaderships and Awards: Endeavor Scholar; Newman Fellow; Chancellor's list; Commonwealth Honors Student; 29 Who Shine Award Recipient; University Civic Engagement Award;
  - Courses Taken or Taking: Object-Oriented Programming; Procedural Programming; Computer System; Computer Organization and Design; Software Specification and Design; Algorithm and Data Structures; Design of Operating System; Empirical Methods for Computer Science; Model of Computation; Social and Ethical Aspects of Computer Science; Database Systems; Parallel & Distributed Computing; Calculus; Discrete Structures; Probability; Linear Algebra;
- Lawrence High School Diploma** | Math, Science and Technology High School June 2016
- Honors, Leaderships and Awards: Valedictorian; L'Pin award recipient;

## TECHNICAL EXPERIENCE

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- Senior Design Project** | 3D Geometry Foot
- Designed an algorithm that can reconstruct 3D models of people feet from images and find their measurements
- Research** | Convolutional Neural Network and its Ability to Reproduce 3D Models
- Researching ways of applying CNN in the reconstruction of 3D models
- Research** | Hopfield Neural Network Implementation for Recovering Bitmaps
- Developed a web application that can be used to test the capacity of bitmaps recovery by HNNs
- Video Game Development** | Runner-Z
- Designed a video game for the Intellivision console of 1979
- Python Library Development** | CleverAI
- Currently constructing a python Neural Network library
- PerkinsHack "Privacy, Please!" Winning Project** | EZForm
- A text reader for images with textual context that allows blind individuals to fill out forms in private
- Portfolio Site** | <https://josuenrivera.site>
- Built a personal website to showcase my current and past projects

## TECHNICAL SKILL

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### Programming Languages, Libraries and Frameworks:

- Fluent: Python; C; Java; HTML; CSS; JavaScript; Node.js; Basic; SQL; Git; JSON; XML; OpenCV; TensorFlow; Keras;
- Familiar: C++; PHP; jQuery; Bootstrap; Tizen;

### Software:

- Fluent: Blender 3D; Arduino; Photoshop; Microsoft Office 365;
- Familiar: Android Studio; Tizen Studio; Unity 3D; Resolve; SolidWorks;

### Languages:

- Fluent: Spanish; English;

### Others:

- Fluent: Scrum; Agile Development; UML; Unit Testing;

- Familiar: Integration Testing;

## PROFESSIONAL EXPERIENCE

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**Researcher** | University of Texas at Dallas

May 2019 - Present

- Conduct research on software safety and reliability

**Research Assistant** | UMass Dartmouth

September 2017 – Present

- Work as a research assistant for professor Dr. Maoyuan Sun

## LEADERSHIP EXPERIENCE

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**Treasurer** | UMass Dartmouth Big Data Club

September 2018 – Present

- The club focuses on building models to understand trends in large amount of data

**President** | UMass Dartmouth Animation Club

September 2017 – Present

- In charge of leading the club and bringing out the best of animation

**Delegate** | UMass Dartmouth Model United Nations

September 2017 – Present

- Discuss global issues and possible solutions at the NMUN conference in New York City

**UMass Dartmouth Representative** | Leduc Center for Civic Engagement

September 2017 – Present

- Member of the Community Advisory Board

**Chair** | UMass Dartmouth Gaming Society

January 2018 – May 2019

- Chair of the Anime Club

- Member of the executive board

**Senator** | UMass Dartmouth Student Government Association

September 2017 – May 2019

- Civic Engagement Committee Chair (2017 - Present)

- Senator for Class of 2020 (2017-2018), Senator for the College of Engineering (2018-2019)

## CIVIC ENGAGEMENT EXPERIENCE

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**CIS Mentor** | CIS Dept. UMass Dartmouth – Dartmouth, MA

January 2019 – Present

- Mentor various computer science courses at the university

**Leduc Leader** | Leduc Center for Civic Engagement

September 2016 – Present

- Conduct and lead community service events that gets college students involve in their community

**Volunteer** | Food Pantry: Arnie's Cupboard

September 2016 – Present

- Help provide food to students, staff, faculty and community members in need of the university

**STEM Teacher Volunteer** | Fall River YMCA

November 2016 – May 2019

- Taught the STEM class that involved Computer Programming, Physics, Engineering and Robotics

## HOBBIES

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Painting/Drawing

3D modeling

Cooking

Exploring other cultures

Anime

Game design

Watching movies

Robotics/Electronics

Golf

Web design

Pool/Billiard

Learning