Joshua **Beto**

Computer Science Student

619-452-6739 | jbeto001@ucr.edu

Education

University of California, Riverside — *Riverside, CA*

B.S. in Computer Science | GPA: 3.92 — *Expected Graduation: March 2019*

- CS130: Computer Graphics
- CS166: Databases
- CS171: Machine Learning
- CS135: Virtual Reality

Technical Skills

Languages C++ (Proficient), C# (Proficient), Python(Proficient), C (Familiar), Bash (Familiar)

Libraries | Tools Git, Unity3D

Experience

UCR — *Riverside, CA*

Supplemental Instruction Leader — *September 2018 - Present*

- Led a peer study group through an introductory C++ course to boost academic performance
- Created lesson plans and problem sets each week to organize study sessions
- Guided students to avoid common pitfalls and gain a better understanding of the course material

Western Digital — *Irvine, CA*

RAMP Software Intern — *June 2018 - September 2018*

- Migrated firmware automation test client using Python to reduce future work needed to add new test environments
- Created plugins that allowed test environments to interface with the automation test client
- Collaborated with a partner using the Gitflow workflow to complete user stories in a Scrum environment

MindTAPP - Leadership Lab — *Riverside, CA*

Research Assistant - Software Developer — *May 2017 - Dec. 2017*

- Led a small team to create games for leadership training using Unity3D C#
- Made games easier and faster to develop by restructuring code base using Zenject, a DI framework
- Communicated project status and problems weekly with management to set checkpoints, deadlines, and next steps

Projects

3D Tile Map — *Riverside, CA*

Software Developer — *Jan. 2018 - May 2018*

- Created a procedurally generated 3D tile map in Unity3D C#: `https://github.com/JBeto/3D_Tile_Map`
- Generated procedural terrain using Perlin noise and used linear interpolation to remove visual cracks between tiles
- Optimized performance by joining tile meshes into mesh chunks to reduce object overhead

Guitar-Hero — *Riverside, CA*

CS120B: Embedded Systems — *Feb. 2017 - March 2017*

- Built a Guitar Hero inspired hardware game on the ATMega1284P microcontroller in C: `https://goo.gl/UNdZZr`
- Simplified code design and debugging process by separating functionality into different state machines
- Configured hardware components to take player input, play a song, and display notes

Extracurricular

ACM-ICPC (International Collegiate Programming Contest) — *Riverside, CA*

Team Member — *November 2018*

- Placed 15th among 90+ teams in regional SoCal ICPC 2018 contest
- Practiced competitive programming problems using C++ with teammates for a year prior to the contest