Daniel Almeraz

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GitHub: dalmeraz

Education

University of Texas at El Paso
2016 – Current | GPA: 3.96
· Computer Science Undergraduate with Presidential Scholarship minoring in Math
· Expected Graduation Date: **December 2019**

***Pending:* Graduate School**
Starting: January 2020
· Will be pursuing a masters to further develop my knowledge in Machine Learning and Computer Vision
· Expected Graduation Date: **December 2021**

Experience

Google | Software Engineering Intern | Seattle, Wa | 05.27.2019 - 08.23.2019

· Contributed to the Bulk team which provides tools for advertisers to make automated changes to their accounts.
· Worked through the design and full stack development of a tool to allow advertisers to manually execute their normally manually scheduled changes at any point in time.
· In Java, worked on communication among servers through remote procedure calls, created a new form of execution, stored new information to a data base, handled several edge cases, and refactored code for flexibility.
· In Angular Dart, HTML and SASS/CSS, refactored existing code from Particle to Angular, and created dialog of information with the advertiser that would send a execution request along with extra needed information to the backend.

UTEP IMSE Research Labs | Undergraduate RA | El Paso, Tx | 11.16.2018 - 5.25.2019, 8.25.2019 - Current

· Computer Science research assistant in Industrial Manufacturing and Systems Engineering's Intelligent Systems Engineering Lab which works hand in hand with Lockheed Martin Aeronautics.
· Using Unity, OpenCV and coded in C, C#, and C++, lead efforts in Computer Vision and Operational Systems of a small inspection vehicle that is capable of detecting defects in inspections.
· Using Keras and in Python, lead deep learning endeavors in testing different augmentation type and their results.

Google | Engineering Practicum Intern | Los Angeles, Ca | 05.28.2018 - 08.10.2018

· Contributed to the Ads Diagnostic Tool team which is a platform for advertisers to diagnose the reach of their search ads.
· In Java, worked on the refactoring of an over complicated back end enum that in result created more independence between components and create a future where the whole enum can be deprecated.
· In Dart, HTML and SASS/CSS, worked on front end features of the Ad Diagnostic Tool such as adding logos, fixing issues in design, and the implementation of new features.
· Volunteered for Computer Science Summer Institute (CSSI) as a panel member for an event.

Technical Skills

· **Languages:** Java, Python, Dart, C, HTML, SASS/CSS, Bash, C++, C#
· **General:** OpenCV, Keras, GitHub, Bitbucket, Linux, Unity

General Skills

· **Leadership & Communication:** Participating in band for 8 years, lead several groups in which communication was crucial for success.
· **Teaching:** Taught concepts I am comfortable with to younger audiences both in music and computer science.
· **Bilingual:** English and Spanish.

Projects

· **danielalmeraz.com:** Personal portfolio which contains contact information, a digital version of the resume, and even more projects I have worked on!
· **Gods of the Neon City**: VR Game created and published by Game Builders! in which a user interacts with an agent in virtual reality while trying to solve the puzzle of a missing amulet. Worked on scene development for the game using the Unity game engine. The game has been used for human computer interaction research by a UTEP research lab.
· **GANs for cats and dogs:** Using Keras, created a generative adversarial neural networks that created images of cats and dogs with the purpose seeing if these newly created images could be used as data augmentation which when added to the training dataset resulted in an increase in accuracy from 73.3% accuracy to 76.4%.
· **Image segmentation:** Using Python OpenCV, created an image segmentation program that used a disjoint set forest to group together similar areas of an image and tested potential improvements.
· **Game Theory Tournament:** In Java, created a custom agent to compete in a tournament that had three different options in strategies: maxmin payoff, minimax regret, and max average payoff. Which to use was found through a random selector that learned and favored choices that did better using a softmax function.