Alexis J. Renderos

Computer Engineer

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Education

B.S. Computer Engineering @ Iowa State University
Aug 2018 – May 2022 / Ames, Iowa
- Recognized as a Google Hispanic Student Leadership Scholar

Work Experience

Software Engineering Intern @ Collins Aerospace
May 2019 – Present / Cedar Rapids and Ames, Iowa / Active Security Clearance: Secret
- Developed mission-critical software using **C++** for the ARC–210 family of military aircraft radios.
- Designed and maintained automated tests in **Python** for regression testing.
- Practiced Agile and Scrum in 2 week sprints in a team of 10 developers.

Chief Operator @ 88.5 KURE Ames Alternative
Sept 2018 – Present / Ames, Iowa
- Oversaw all broadcast functions, ensuring the station met FCC requirements.
- Worked with a team of 50 DJs and talk show hosts in order to maintain a cohesive programming schedule.
- Produced, mixed, and mastered broadcast content recorded in studio for air.

Systems Support Specialist @ Iowa State University Biology IT
Feb 2019 – May 2019 / Ames, Iowa
- Worked constructively with researchers and professors to develop innovative technical solutions.
- Analyzed new and emerging technologies for researchers to implement.
- Generated and maintained documentation to develop and curate a knowledge base to educate future S^3's.

Makerspace Technologist @ Ela Area Public Library
Aug 2016 – Aug 2018 / Lake Zurich, Illinois
- Assisted individuals of all ages in using the Ela Library's makerspace.
- Developed, taught and evaluated a variety of technology and maker programs.
- Worked constructively with vendors to plan programming in the library.
- Researched new and emerging technologies to present to the library director.
- Generated and maintained documentation, reports, and statistics to foster the development of the makerspace.

Robotics Engineering Intern @ Engis Corporation
June 2016 – July 2016 / Wheeling, Illinois
- Assisted in the operation and maintenance of robotic systems.
- Ensured part quality and consistency throughout the manufacturing process.
- Interpreted data collected during manufacturing for Engis employees.

Software and Electrical Mentor @ FIRST Robotics Competition
May 2018 – Present / Lake Zurich, Illinois / Team 2358 "Bearbotics"
- Assisted team members with developing **C++** code and designing electrical systems to control a 130lb robot.
- Effectively communicated with other team mentors to create a cohesive curriculum for new members.

Skills

Programming Languages
C, C++, Python, HTML, CSS, Javascript, Java, Kotlin, Go, PHP, SQL

Libraries & Frameworks
TensorFlow, Keras, OpenCV, Node.JS, Babylon.JS, Bootstrap, ROS

Tools & Software Applications
Git, Amazon Web Services (AWS), Google Cloud Platform, Heroku, AutoCAD, Inventor, KiCAD, Quartus Prime, Adobe Creative Suite

Languages
English, Spanish, German

Organizations

Cyclone Rocketry
- Avionics Team Member

Friley Residence Hall Executive Board
- Financial Director

FIRST Robotics Competition Team 2358
- Software and Electrical Captain

Projects

Lifedrinker
Convolutional Neural Network (CNN) taught to identify a chosen object of interest at range using a live camera feed in conjunction with a **Python–based OpenCV** tracking algorithm to assist in the detection, identification, and tracking of the target.

Clark
60 pound semi–autonomous custom designed and fabricated robot running on **ROS**. It uses a variety of sensors and a network of cameras in order to navigate its surroundings.

Personal Webpage
Built using **Bootstrap**, the website emphasizes a clean and responsive design. It highlights many of my personal projects, and acts as an interactive resume.

7Words
Python–based web tool launched on **Heroku** intended to mass lyric check a set of songs. It uses the Genius and Spotify APIs to search through a playlist of songs for language that could go against FCC broadcasting guidelines.