

Professional Experience

Part-time Software Engineer

DeNOVO Solutions, Aurora, CO | August 2020 - Present

- Developed a modular framework to connect sensors, analysis modules, and resource allocation on dynamic remote systems.
- Developed a universal remoting CLI tool that abstracts different OS kernel commands.
- Developed an aggregation and deployment framework that utilized kubernetes to parallel run different applications and compare data quality and performance.
- Developed resume to job comparison tool that finds the best suited people for the job using parsing and NLP techniques

Software Engineering Intern

DeNOVO Solutions, Aurora, CO | May 2020 - August 2020

- Part of a 4 person team to research different tools and develop useful projects for the company
- Used third-party APIs to retrieve new RFIs and potential contracts for proposal opportunities
- Aggregated documents and information into MongoDB and PostgreSQL
- Preprocessed information and descriptions/documents for NLP analysis and prioritization
- Developed a lightweight frontend for users profiles, company profiles, metrics visualization and allowing feedback for improvement of ranking and analysis

Security Officer

Advantage Security, LLC, Colorado Springs, CO | August 2018 - August 2020

- Patrolled industrial and commercial sites to prevent and detect signs of intrusion and ensure the security of doors, windows, and gates
- Monitored facilities and wrote reports for daily duties and irregularities including responding to alarms, investigating disturbances, and reporting abnormalities

Intelligence Analyst

U.S. Army Special Operations Aviation, Fort Campbell, KY | February 2012 - August 2018

- Researched various locations to create products providing accurate and relevant information
- Explored multi-source data and presented that information to ensure organizational tasks done in a safe and efficient means
- Monitored and tracked dynamic objects on mapping software to determine future locations based on historic data points
- Directed daily operations of a five-person section within the organization while collaborating with them to developed products to provide relevant and useful information

Education

Bachelor of Art in Computer Science

University of Colorado at Denver | May 2022

Relevant courses: Advanced Programming, Network Programming, Web APIs, IoT & Cyber-physical systems, Graph Theory & Applications

High school diploma

Harrison High School at Colorado Springs | May 2011

Additional Projects

Arduino to Raspberry Pi Zero IoT

- Multiple sensors used to detect real-time data, filtered and forwarded w/ Arduino nano33 to Raspberry pi zero via BLE
- Filtered data to reduce network load then pub'd to a MQTT to stored and analyze for anomalies
- Plotly was used to visualized the data on a lightweight server on Raspberry pi zero

Arduino to Raspberry Pi 4 B+ Autonomous vehicle

- Raspberry pi camera recorded track for vehicle to follow
- OpenCV and numpy used to analyze the video in real-time to determine the direction to steer the vehicle
- Raspberry pi communicated the results via I2C to an arduino that steered the motors

Project Management Tool

- JavaFX desktop GUI and frontend client to retrieve requested info to be displayed
- Python Backend multithreaded server to retrieve to store and retrieve user data

Michael Martinez

Software Engineer

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Dedicated software professional and data analyst. Willing to work as a project team member and individually as required. Goal oriented, organized and adapts well to new environments. Seeking a position where I can use my skills to help improve an organization, tackle new challenges, improve problem-solving skills and expand knowledge.

Key Skills

- Python
- C/C++
- Java
- REST APIs
- Docker/Containerization
- Kubernetes
- Jenkins
- ML/AI
- Agile Development
- Analytical skills
- Critical thinking
- Teamwork