

VERONICA MEDRANO

OBJECTIVE

To leverage my award-winning technical and interpersonal skills in a summer internship that promotes audacity and creativity while confronting the world's most challenging problems.

EDUCATION

Northwestern University, Evanston, IL – *MS in Robotics (MSR)*

SEPTEMBER 2018 – PRESENT

SKILLS/TOOLS

Python, Ubuntu Linux, Robot Operating System (ROS), OpenCV, Rviz, Gazebo, Git/Github, Sentiment Analysis, Scikit-learn, NLTK, Raspberry Pi, Watson APIs, Bash/Batch, C/C++, V-REP, Javascript/Node.js, SQL, SPARQL/DBPedia, OpenCyc, RDFS/OWL, XML, Awk/Grep, Django, R, Arduino, MATLAB/Simulink, Mathematica, LaTeX, VisualStudio

PROFESSIONAL EXPERIENCE

Harris, Geospatial Systems, Location – *Software Systems Engineer*

APRIL 2017 – APRIL 2018

- Developed Python applications to verify software for GPS OCX (Global Positioning System Next Generation Operation Control System)
- Led software development engineers in troubleshooting software test issues in the Front-End (User Interface) and Back-End (server/database)

Boeing Satellite Systems, Location – *Lead Systems Engineer, Integration and Test Engineer*

JANUARY 2014 – APRIL 2017

- Awarded for leading team of approximately 30 multi-discipline engineers to execute a Technical Design Review within schedule and budget for a closed area program
- Tested various Mexsat terminal-types in fast-paced, on the field environment at customer sites in Mexico
- Executed and debugged critical software-driven payload in-orbit and ground system tests for Mexsat-Morelos 3 satellite
- Developed communications link budgets and worst-case analyses for multiple satellites, resulting in award for exceptional performance

L-3, Mission Integration Division, Greenville, TX – *Co-op Electrical Design Engineer*

JANUARY 2012 – AUGUST 2012

- Collaborated with a team of eight engineers to design the lighting system of a special mission aircraft

PROJECTS

TJBot: A Caring Robot, MSR Program – *Graduate Student Researcher*

JANUARY 2019 – PRESENT

- Build a caring TJBot using Watson APIs

Sawyer, The Artist, MSR Program– *Graduate Student Researcher*

DECEMBER 2018

- Programmed Sawyer the Robot to detect and draw faces; team awarded first place in Robotics competition
- Developed the face detection algorithm

Predicting Mental Disorders in Tweets, MSR Program – *Graduate Student Researcher*

DECEMBER 2018

- Developed Python program to predict mental disorders in tweets

Tracking Objects using ROS and Python, MSR Program Hackathon – *Graduate Student Researcher*

SEPTEMBER 2018

- Programmed a webcam mounted on servo motors to track the motion of a ball using ROS, Python and OpenCV

Mini Robot Car with Python and Raspberry Pi– *Hobbyist*

MAY 2015 – JULY 2015

- Built and tested robot using Python programming language and Raspberry Pi microprocessor
- Implemented user control functionality by running device via keyboard and mobile device

ACTIVITIES/INTERNATIONAL EXPERIENCE

- **Active volunteer**–experience includes: meal delivery for homeless and disabled, entertaining, mentoring, and tutoring children in homeless shelters, motivating children to prepare for Special Olympics
- **The Green Program in Iceland** (August, 2013): Conducted experiential hands on site visitations to renewable energy facilities; collaborated with diverse capstone team to design autonomous control system that would decrease the risk of electrocution from solar panels