

Rithvik Chuppala

US Citizen | 12th grader

EXPERIENCE/LEADERSHIP

FRC Robotics - *Head, Software Lead, Webmaster*

Head of Outreach/PR- Valkyrie Robotics: Planned and volunteered for outreach events/demos at local elementary and middle schools

Software Lead- Monta Vista Robotics: Led and trained a group of 15 software students. Wrote code for several subsystems of the robot, delegated coding projects to other students, and organized and maintained code that went onto the robot from GitHub

Webmaster- Monta Vista Robotics: Regularly updated and maintained MVRT's award-winning website

Science Olympiad - *Executive Officer, Engineering Captain*

Executive Officer- Helped conduct meetings, handle logistics, plan for events, prepare members for competitions, and make decisions for the club.

Engineering Captain- Helped members from all 3 MVSO teams, by giving design and construction advice, helping test and prototype their devices, and managing costs and budgeting for the devices.

Naval Postgraduate School - *Research Intern*

Worked on an Airfield Damage Assessment project that uses computer vision, UAV technology, and GPS navigation to localize and assess damage done on a damaged military air strip. Built an Android app that provides navigating capabilities to the drone, including waypoint navigation, manual flying, livestream video, and positioning data

Huawei IOT Department- *Intern*

Built an Arduino Robot Arm, that picked up objects and placed them into containers, and an infrared sensor vehicle, that followed a beam of light, for the IOT Department of Huawei.

Teaching and Volunteering

Coordinated a hands-on engineering and physics program, making the curriculum and organizing its implementation at various elementary schools.

Led a group of students who went to Columbia Middle School, a local low-income middle school, and taught the children basic robotics and engineering concepts through a project-based curriculum

MV Phys Eng- *Director of Engineering*

Conducted meetings and held presentations on hardware and engineering topics. I also mentored and tutored students for AP Physics, teaching concepts and holding review sessions before tests

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EDUCATION

Monta Vista High School 2015-2019(exp.)

GPA: **4.70 W(4.00 U/W)** | SAT: **1600**

Selected Coursework: AP Calc BC, AP Chemistry, AP Physics 1, APCS, AP Stats

Foothill College and West Valley College

Coursework: CS 1A, CS 30A, CS 3A, Math 4C

INDIVIDUAL PROJECTS

Security System: DIY, rudimentary security system using Arduino and Open CV

Voice-Command Medical Assistant:

Listens to symptoms and would subsequently respond with a diagnosis using Raspberry Pi

Voice-Command TurtleBot Simulation:

A simulated robot that uses voice-command to move around a house using ROS and C++

SKILLS

Programming Languages: Java, Python, C++, C, HTML/CSS, JavaScript, PHP

Tools: Git, Web Development, Arduino, Raspberry Pi, Open CV

Platforms: Android, ROS, Arduino, WPI Lib, Android, Raspberry Pi

SELECTED AWARDS

2017 FRC National Championships- **2nd Place in Division**

2018 Regionals Science Olympiad- **3rd**

2018 States Science Olympiad - **5th**

2018 Regionals Sci Oly- Hovercraft- **2nd**

2017 States Sci Oly - Robot Arm- **5th**

2017 Cal Cup Quiz Bowl- **1st Place JV**

2015 Youth Focus Talent Competition- **Grand Champion**

