

Dr. George Kirkman

USC Ph.D. EE 1990

UCLA MBA 2003

Georgia Tech BS Physics 1984



Present Position - Educator and Robot Doctor at [Rolling Robots](#)

Launched the Rolling Robots Kids Tech Workshop 2008
Founded [Rolling Robots Outreach](#) 2016 501(c)3 non profit



Work Experience



RF Electronics and Systems
Engineering for Commercial
Spacecraft



Development of Engineering
Design process.
RF Electronics R&D

Integrated Applied Physics

Start-Up President
High Voltage Electronics
R&D and product design

Teaching Experience



Graduate and Senior Level
Electrical Engineering Classes
RF Electronics and MMIC Design



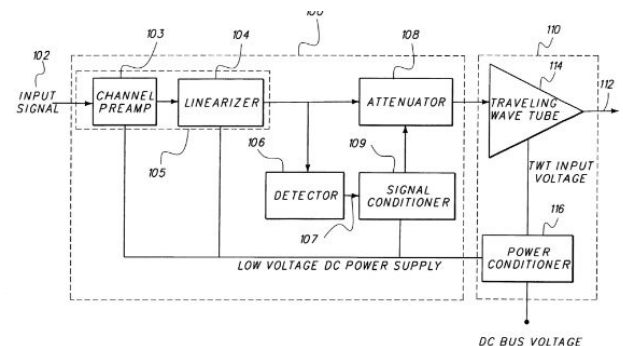
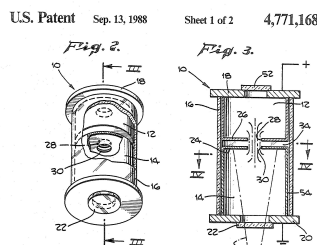
First Year Physics
Classical Mechanics
Physics Lab



Volunteer Instructor
3 -5 grade Science Lab
Developed Labs supporting classroom
work

Inventing Experience

US and Foreign Patents
High Voltage and
RF Electronics
US [4771168](#), [5057740](#),
[6369648](#), [6781454](#),
[6048242](#), [12468791](#)



Experience Coaching Student STEM Projects

[VEX Robotics](#)

World Championship Qualifications years 2014, 2015, 2016, 2017, 2018

Division Champion at World Championship 2017

[Excellence Award](#) at World Championship 2015

Design Award at World Championship 2016

Design Award at State Championship 2014, 2015, 2016, 2017, 2018

Pan Pacific Championship Tournament Champions 2016, [2017](#)

MOONBOTS - A Google Lunar XPRIZE Challenge

World Finalist [2014](#), [2015 \(2 teams\)](#)

Littlebits Global Makeathon - Grand prize 2013

Project displayed at [World Maker Faire New York](#).



[Google Science Fair 2015](#)

Invited to present our Robotics Team at the Awards Ceremony

[RoboGames](#)

Junior Sumo team wins Gold and Silver medals

Mech Warfare Robot wins Bronze

Participants in Firefighting Challenge

Participants in robot Combat

[BotBall](#) 2013, 2014

Judges Award at 2013 Los Angeles Regional

Participant in the 2014 Los Angeles Regional and



[PV Space Balloon Team](#)

Developed an independent team to study high altitude science.

Consisted of students from multiple different High Schools

Launched and recovered balloons 2014, 2015, 2016, 2017

Balloons travel to over 100,000 feet altitude and 150 miles range

Developed communications systems

Science experiments have included

Effects of radiation on SD Card

Measurements of pressure and temperature

Measurement of speed of sound vs altitude -- [More](#)



[Palos Verdes High School](#)

Assisted with High School Engineering program

Developed and taught PVIT 101 an introductory class to designed to prepare students for work on independent engineering projects. Included Arduino Programming, Simple Electronics, 3D design and printing, use of laser cutter, use of hand and power tools, assembly techniques.