Emilio Gordon

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EDUCATION

UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN

AEROSPACE ENGINEERING Expected May 2019 | Urbana, IL Cum. GPA: 2.9 Major GPA: 3.2

SKILLS

PROGRAMMING

Python Java HTML Matlab CSS PHP LabVIEW LATEX STK Processing C/C++ Linux

HARDWARE

NX 10 Additive manufacturing Arduino Laser Engraving Solidworks Raspberry Pi TIG Welding NX Thermal Sim Pyrometric Interferometry

COURSEWORK

Aerospace Control Systems Incompressible Flow Mechanics of Aerospace Structures Aerospace Flight Mechanics Thermodynamics

(Lecturer & Instructor)
Intro to Satellite Development

AWARDS

2016 - President's Award Scholar

2015 - James Scholar

2015 - ITF Fifty for the Future

2014 - National Hispanic Recognition

INTERESTS

RESEARCH

- Topology Optimization
- Advanced Space Propulsion
- Ion Propulsion System
- Adaptive Computing Systems
- CubeSat and SmallSat

PERSONAL

- Graphic Design
- Long Distance Cycling
- Cooking

EXPERIENCE

LECTURER

University of Illinois

JAN 2017 - PRESENT | UIUC

- Planning and teaching a semester long university credited course.
- Overseeing student development and integration into university's satellite program.
- Involved in the research and designing of new course and materials.

LECTURE DEMONSTRATION SPECIALIST

UIUC PHYSICS DEPARTMENT

AUG 2016 - PRESENT | UIUC

Communicate with professors regarding lecture demonstration materials

MENTOR

CoderDojo

AUG 2013 - AUG 2015 | CHICAGO, IL

- Mentored children between the ages of 7-14 on web programming
- Taught for 4 classes, mentored for 57 classes having introduced more than 900 kids in HTML programming

TEAM FOUNDER

FIRST FTC TEAM ROBOBEAM

JUN 2014 - AUG 2015 | CHICAGO, IL

- Organized a community robotics team in low income community
- Motivated youth to consider engineering and STEM as a career.

RESEARCH

SATELLITE DEVELOPMENT ORGANIZATION: LAICE

THERMAL SIMULATION SYSTEMS TESTING

AUG 2015 - PRESENT | UIUC

- Created data acquisition software for pyrometric interferometry procedures using LabVIEW
- Calculated emissivity values for carbon fiber and black anodized Aluminum 6061
- Improved test accuracy by 60% and decreased test duration by 5 hours
- Implemented acquired emissivity data into NX Space Systems Thermal Simulation.
- Thermal simulation results used for critical design analysis.

ILLINOIS ENGINEERING FIRST-YEAR EXPERIENCE

ACCELERATED LIFE TESTING OF XENON ION THRUSTERS JUN 2015 – AUG 2015 | UIUC

- Developed procedures for accelerated life testing in ion thruster testing.
- Presented findings at IEFX Research Fair

ACTIVITIES

NASA MICRO-G NEXT

CO-DESIGNER, ED-OUT SPECIALIST

Nov 2015 - Jul 2016 | UIUC

- Designed and constructed a tool that can operate in neutral buoyancy
- Addressed current Deep Space Exploration problems faced by NASA
- Accepted as 2016 Micro-G finalist
- Received feedback from NASA NBL Divers on tool use.
- Final report pending publication.