Emilio Gordon

ergarci2@illinois.edu | ergordon.github.io | 773.988.3071

EDUCATION

UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN

AEROSPACE ENGINEERING Expected May 2019 | Urbana, IL Cum. GPA: 3.02

SKILLS

PROGRAMMING

Python Java HTML
Matlab CSS PHP
LabVIEW LETEX STK
JavaScript C/C++ Linux

HARDWARE

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

COURSEWORK

Aerospace Control Systems
Incompressible & Compressible Flow
Mechanics of Aerospace Structures
Aerospace Dynamical Systems
Electric Propulsion
Spacecraft Control System
(Lecturer & Instructor)
Intro to Satellite Development

AWARDS

2018 - Dean's List

2017 - Michael A. Miller Aerospace Engineering Innovation Award

2016 - President's Award Scholar 2015 - ITF Fifty for the Future

INTERESTS

RESEARCH

- Advanced Space Propulsion
- Deep Space Exploration
- Adaptive Computing Systems
- Mission Planning & Design
- CubeSat and SmallSat

PERSONAL

- Graphic Design
- Long Distance Cycling
- Cooking

RESEARCH

MULTI-MODE MICROTUBE-ELECTROSPRAY PROPULSION

LEAD THERMAL RESEARCHER

AUG 2017 - PRESENT | UIUC

- Research and development into multi-mode propulsion
- Overseeing technological advancement from TRL3 to TRL5
- Performing ANSYS thermal simulations on various thruster assembly configurations
- Designing experiment procedures for temperature measurement and simulation comparison
- Developed data acquisition software for transient thermal test using LabVIEW
- Closely working with electric propulsion test systems including vacuum chambers and cryocoolers

SATELLITE DEVELOPMENT ORGANIZATION: LAICE

Undergraduate Researcher

AUG 2015 - AUG 2017 | UIUC

- Co-writer on two NASA accepted USIP proposals for \$500,000 research grant
- Developed data acquisition software for pyrometric interferometry procedures using LabVIEW, improving test accuracy by 60%
- Clean room trained with experience working on satellite assembly
- Performed critical satellite ADCS tests using Helmholtz cage

EXPERIENCE

LECTURER

University of Illinois

JAN 2017 - JAN 2018 | UIUC

- Planned and taught a semester long university credited course.
- Oversaw student development and integration into university's satellite program.
- Involved in the research and design of new course and materials
- Taught over 30 students throughout the two semesters of the course

LECTURE DEMONSTRATION SPECIALIST

UIUC PHYSICS DEPARTMENT

AUG 2016 - PRESENT | UIUC

Communicate with professors regarding lecture demonstration materials

ACTIVITIES

NASA BIG IDEA

TEAM LEAD

AUG 2016 - FEB 2017 | UIUC

- Led a six person team in the design of a fully electric lunar space tug
- Applied a wide range of aerospace concepts to develop a modular, adaptable design

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