Nicholas Godshall

nickgodshall.com

nsgodshall@ucla.edu

213.444.6547

Education

- **University of California, Los Angeles** — Los Angeles, CA
  B.S. in Mechanical Engineering, Magna Cum Laude; GPA: 3.91 — *Degree Awarded June 2022*
  Relevant Coursework: Fluid Dynamics, Thermodynamics, C++ Data Structures, Material Science, Strength of Materials, Dynamic System Controls

- **Pasadena City College** — Pasadena, CA
  A.A. in Natural Sciences, A.A. in Engineering & Technology; GPA: 3.93 — *August 2016 - June 2019*

Work Experience

- **Systems Engineer** — El Segundo, CA
  Booz Allen Hamilton — *June 2021 - August 2021*
  - **Digital Engineering**: Work with various aerospace clients to develop Systems Engineering Integration solutions. This includes MBSE modeling of space, cyber, and organizational systems. Tools used to model systems include Magicdraw, Sparx Enterprise Architect. Tools for simulation include ModelCenter, Solidworks, STK, AFSMIM, anylogic. Also used basic script writing in Python and Java to create solutions.
  - **Business Development**: Worked with senior associates at firm to research various space startups to discover potential contract partners. Conducted research into companies contract performance history, techincal capability, and financial and reported findings to leadership.

- **Undergraduate Researcher** — Los Angeles, CA
  Nanoscale Transport Research Group, UCLA — *September 2020 - February 2021*
  - **High Temperature Research**: Current research focuses on the investigation of various computational methods to minimize error in high temperature thermal property measurement using Angstrom's method.
  - **Python Development**: My work consisted of development of Python code to minimize the error of high-temperature thermal property estimation. Code I developed preform tasks such as generating simulated data according to experiment parameters as well as applying mathematical methods to extract desired measurements from real data.

- **Research Intern** — La Cañada, CA
  NASA Jet Propulsion Laboratory (JPL) — *September 2019 - December 2019*
  - **Research Assistant**: Collaborated with planetary researchers to study atmospheric conditions on Jupiter by working with proprietary IDL software to generate vector fields of active storms on Jupiter.
  - **Data Archival**: Developed several scripts using Python to organize tens of thousands of images of Jupiter and create XML label files, such that the data would be compliant with NASA's PDS standards, allowing for the data to be published and shared with the scientific community.
  - **Professional Presentations**: Created monthly 5-6 page technical reports detailing the progress that I made on my project.

Projects

- **OSTEM NASA Rover Building Competition**: Worked with a team of ten students from all over the country to design program market a rover in a five day NASA NCAS competition to design a semi-autonomous rover using at NASA Stennis Space Center, MS. Personally lead the design of the robotic claw for the first prize winning rover.
- **Digitally Igniting Fireworks**: Designed and assembled a custom mortar tube and modified fireworks with Ni-Chrome wire in order to remotely detonate the explosive using Arduino and simple circuitry.

Skills

- **Software**: Solidworks, STK, ModelCenter, MagicDraw, AutoCAD, Linux, AFSIM, Anylogic, EA Sparx, Abaqus.
- **Programming Languages (In order of Competency)**: Python, C++, MATLAB, JavaScript.
- **Other Skills**: Welding, Soldering, 3D Printing, Laser Cutting, Machining.