

# Sean Hornchek

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## Education

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### Loyola Marymount University

*Bachelor of Science, Mechanical Engineering (GPA: 3.5)*

*Master of Science, Mechanical Engineering (GPA: 4.0)*

**Los Angeles, CA**

*Graduated May 2023*

*Expected Graduation: December 2024*

## Engineering Experience

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### Loyola BAJA SAE Competition

*Group Leader / Club Secretary*

**Los Angeles, CA**

*2022-2023*

- Spearheaded manufacturing and design of Baja SAE competition vehicle for capstone.
- Led club meetings and workshops for students to become involved with projects.
- Analyzed and designed suspension layout/parameters with Solidworks and Lotus Shark.
- Designed and manufactured vehicle drivetrain system and powertrain guarding.
- Utilized Arduino IDE and Matlab to collect and plot suspension data for vehicle dynamics testing.

## Industry Experience

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### Frontier Technology Inc.

*Digital Engineering/MBSE Intern*

**El Segundo, CA**

*2022-2023*

- Supported Space Force digital engineering efforts and task order contracts.
- Led intern modeling assignments projects for Enterprise Systems Engineering Plan.
- Completed training and certification for DevOps and Frontier SBIR toolset and created user training guide.

### SimpleHuman LLC

*Mechanical/Design Engineering Intern*

**Torrance, CA**

*2023*

- Assisted in development of prototype products and testing fixtures design.
- Created and led testing guidelines for future and current products.
- Developed vacuum pressure relief system and LED diffraction through calculations, empirical testing, and design verification.
- Managed prototype product manufacturing bill of material processes, ensuring timely delivery of project.

### Northrop Grumman Corporation

*F-35 Lightning II Manufacturing Engineer*

**Redondo Beach/Palmdale, CA**

*2023-Current*

- Structured and maintained F-35 production bill of materials (BOM), text, and 3D technical instructions.
- Incorporated manufacturing execution system (MES) work orders through SAP SE software.
- Investigated production errors, systems discrepancies, manufacturing disruptions, and engineering changes.
- Completed F-35 wire harness build to process (BTP) packages through 2D drawing verification, serving as team wire harness POC.

## Technical Skills

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Autodesk Inventor/Fusion 360, SolidWorks, Matlab, Sparx EA Modelling, Cameo Enterprise Architecture, National Instruments Multisim, Microsoft Office, 3D Printing - CURA, Printrbot, Prusa, Stratysis Objet, and 3D Systems Project, ROBOTC, Advanced Bike Mechanic Skill Set

## Languages

Fluent in English and Korean

