

# SeanLiam McCarthy

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## EDUCATION

**University of California, Los Angeles (UCLA) – 3.87/4.0 GPA**

Los Angeles, CA

*Bachelor of Science – Mechanical Engineering*

Expected Spring 2021

Technical Breadth Computer Science

**Relevant courses:** CAD, FEM, & GD&T (SolidWorks), Intermediate Dynamics, Controls & System Modeling, Thermodynamics & Heat Transfer, Fluid Dynamics, Statics, Abstract Data Types & Algorithms

## ENGINEERING PROJECTS

**The Real Deal – Robotic Poker Dealer & Player**

January 2021 – Present

*Project Manager*

- Delegated work, created schedule to meet project deadlines over the course of 2 quarters, organized team meetings
- Designed shuffling mechanisms, created SolidWorks parts, assemblies, & motion studies for prototype

**Overdrive Guitar Pedal & Looper – Independent**

April 2020 – Present

- Developed a low voltage AC circuit using basic DC offset and amplification principles to distort input waveforms
- Modeled system as low pass and band pass filters using transfer functions to find cutoff / resonant frequencies

**Bruin Racing Baja SAE**

September 2019 – April 2020

*Chassis Sub-Team*

- Modeled jigs for chassis fabrication with SolidWorks and completed basic rapid prototyping & machining

## RELEVANT SKILLS

**Technical Skills:** SolidWorks, MATLAB, C++, Python, First Principles (Proficient), Machining, FEA (Basics)

**Other:** Interpersonal & Communication Skills, Teamwork, Creative, Inquisitive, Technical Documentation, MS Suite

## RELEVANT EXPERIENCE

**Air-Tec**

Carson, CA

*Assistant Project Manager Intern*

August 2020 – Present

- Supported a senior project manager with daily functions in HVAC controls and construction
- Assembled BOM and purchasing list to facilitate inhouse manufacturing of select construction baskets
- Worked regularly with prints & mechanical drawings to pull permits, schedule inspections, and coordinate work
- Developed, designed, and maintained a website for clients to view property blueprints using PHP and MySQL
- Prepared documentation for a distribution partnership agreement between employer and a controls vendor

**SyncFab**

Los Angeles, CA

*Remote Procurement Intern*

June 2020 – Present

- Assisted onboarding of manufacturers to serve aerospace, defense, automotive, and medical device industries

**UCLA Henry Samueli School of Engineering**

Los Angeles, CA

*Undergraduate Mentor*

Summer 2019, 2020

- Led a CAD workshop with 48 attendees regarding basics of part modeling and assemblies for prototyping
- Co-Hosted daily and weekly MATLAB discussion sections for groups of 22 & 23 UCLA Transfer Students
- Created administrative documentation for execution of an interdisciplinary technical project/hackathon

## AWARDS

- UCLA Dean's List (5) – awarded to students with a quarterly GPA exceeding 3.75
- John R. Wooden Scholarship Recipient (1)

## INTERESTS

- Guitar – 2 years
- Soccer – 17 years