

Jean-Luc Chamaa

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Education

University of California, Los Angeles
Bachelor of Science in Mechanical Engineering

Cumulative GPA: 3.0
Expected June 2016

Relevant Coursework

- Statics & Strength of Materials - Fluid Dynamics - Computer Science (C++) - Electrical Circuits & Analysis
- Dynamics of Rigid Bodies - Engineering Thermodynamics - Feedback & Control - Analysis of Dynamic Systems

Work Experience

UCLA School of Engineering Tech Camp; Instructor & Technical Manager

March 2014-August 2014

- Taught and mentored 14 high-school students through a 4-week hands-on robotics engineering project.
- Designed prototypes in Solidworks, and machined stock 6061 aluminum to .005" tolerance.
- Assembled robots and debugged all radio and wired communication issues.
- Developed curriculum & daily lesson plan content, as well as administered all technical instruction.

Evolutions Footwear; Product Development Intern

August 2013-September 2013

- Advised the company CEO on 3-D drawing techniques and software platforms specific to the shoe industry.
- Created and shipped specific development packages for international sales representatives.
- Managed and organized sales and development samples over the entire 2014 product line.
- Prepared samples and marketing paperwork for the PROJECT Las Vegas Trade Show.

Projects & Involvement

Thales Arduino Challenge – [ArdoPylot](#); Lead Developer

November 2014 – December 2014

- Created a bio-reactive audio-visual and cabin climate controller for in-flight entertainment systems.
- Awarded by Thales as a Top 5 project, of 20+ projects from 4 California Universities.
- Used OpenCV, Arduino, and Python for face detection, light control, serial communication, and audio-visual adjustments.
- Successfully demonstrated project to Thales executives and engineers.

ASME BattleBots UCLA; External Vice President

May 2014-Present

- Successfully organized and coordinated of UCLA's first ever Mechanical Engineering-specific career fair.
- Holding full authority over group project funding, as well as industry, alumni, and department relations.
- Creating and presenting Solidworks CAD lessons to classes of 25+ incoming engineering students.

Arduino LED SuperController Project; Engineer & Designer

June 2014- September 2014

- Brainstormed, designed, prototyped, built, debugged, and completed an Arduino-based device for precision LED Control.
- Employed N-Channel MOSFET power transistors and Pulse Width Modulation in combination to adjust color brightness.
- Programmed Arduino to perform fft on electret microphone input, making the LEDs audio-reactive and bass sensitive.
- Shipped a custom UI, using an RGB backlit LCD screen with LiquidCrystal library for the dynamic display.
- Utilized potentiometers and a modified 5-way navigational switch to permit user input to the SuperController.

Ecochella Pedal Power Generation Project; Project Lead & Manager

February 2014-May 2014

- Created and led 3-man engineering team that created a human powered energy-generating bicycle.
- Led team through 3 rounds of proposals, to become 1 of 7 teams to be allocated resources of an original 25.
- Designed, built, soldered, and performed extensive debugging on the power circuit.
- Engineered and implemented belt-driven powertrain, creating a useable 100 Watts at 25 Volts.

Skills

Software

Experienced: Solidworks CAD • Git
MATLAB • Visual Studio
Familiar: Simulink • Vim

Programming

2000+ Lines: C/C++ • MATLAB • LaTeX
1000+ Lines: Python • Arduino • HTML
Familiar: Android • CSS • Bash

Hands-on

Tangible: Soldering • Machining
Mill • Lathe • Drill Press
Intangible: Circuit & Mechanical Design