

Samuel Lange

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EDUCATION

University of San Diego, Shiley-Marcos School of Engineering

San Diego, CA

Bachelor of Science/Arts, Mechanical Engineering

Expected May 2017

- Minor in Mathematics
- Overall GPA 3.41
- Honors Program Member and Deans List First Honors
- Semester Study Abroad at Queen Mary University of London, Fall 2015

Relevant Coursework (164 total credits earned by May 2017)

Computational Fluid Dynamics

Biomechanics

Analytical Chemistry

Applied Statistics

Computer Programming (Java)

Heat Transfer

MATLAB

Solidworks

Machine Shop Practices

TECHNICAL SKILLS

- Experience with AutoCAD, Solidworks, Mastercam, proLight, COMSOL, Microsoft office programs, MATLAB, G&M coding
- Worked with mills, lathes, laser cutters, 3D printers, CNC machines, arc welders, band saws
- Strong team collaboration and management skills

PROJECTS

Senior Design Project, Vildosola Racing

Fall 2016 to present

- Create a 3D model of the Vildosola Baja Trophy Truck using scanning technology to conduct an aerodynamic analysis using a wind tunnel and COMSOL simulation software
- Reduce the drag coefficient, develop better fuel economy, digitize current body and chassis underpan, determine essential amount of downforce

Final Project, Computational Fluid Dynamics MENG 465

Spring 2016

- Modeled the Magnus effect on COMSOL Multiphysics software
- Created the geometry, mesh, physics and fluid dynamics environment to properly simulate the effect
- Analyzed and determined the impact of different fluids and velocity changes
- Wrote a formal written report to discuss my findings and draw conclusions

PROFESSIONAL EXPERIENCE

Golf Fore Life Instructor, Applewood Golf Course

Summer 2016

- Taught anywhere from 5 to 8 junior golfers the basics of golf and safety on a daily basis
- Responsible for the wellbeing of all juniors at the golf camp
- Interacted and effectively communicated with junior golfer parents as well as golf course customers
- Resolved disputes between junior campers in addition to issues between golfers

Human Resources Assistant, OCS Inc., Golden, CO

Summer 2014 & 2015

- Created Excel spreadsheets, performed detailed data analysis and verified formulas and calculations through advanced use of various Microsoft Office Suite programs
- Determined essential job tasks and developed job descriptions for various employee positions

LEADERSHIP EXPERIENCE

VP of Philanthropy and Community Service, Interfraternity Council

January 2016 to present

- Organized a philanthropic event for our campus that included 210 volunteers and raised over \$13,000 for Operation Help a Hero
- Developed an event for fraternity men to become mentors at a local elementary school; led and coordinated 10 volunteers on a weekly basis

Founding Member, Theta Tau Engineering Fraternity

Fall 2015 to present

- Established a Theta Tau colony at USD with the hopes of becoming a chartered chapter
- Programmed plant tours and career development workshops for Theta Tau members

Fundraising Chair and Social Officer, Beta Theta Pi Fraternity

December 2014 to present

- Responsible for setting up Chapter fundraisers and working with the treasurer to set fundraising goals
- Worked closely with the executive board to help plan events and manage the \$19,000 social budget