Kent Van Belleghem

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EDUCATION

Cal Poly | San Luis Obispo, CA (GPA: 3.44)

Candidate for B.S. in Mechanical Engineering

Expected Graduation June 2022

Relevant Coursework: Thermodynamics, Mechanical Design, Intermediate Dynamics, Mechanical Vibrations, Fluid Mechanics

WORK AND LEADERSHIP EXPERIENCE

K2 Systems | Vista, CA

June, 2021 – September 2021

Product Development Engineering Intern

- Designed new products for solar arrays in SolidWorks, sliced models in Cura, and 3D printed prototypes with Artemis 3D printer
- Researched with product development team and evaluated LMC and MMC conditions to find an affordable tolerance range for a future toolless product
- Presented clear and concise testing results in periodic sprint reviews while responding to market feedback from sales team, executive staff, and CEO
- Selected and tested ideal filament material for new prototypes via 3D printed to scale replicas of PLA, TPU and Polycarbonate
- Collaborated with international branches daily to ensure manufacturing feasibility, price point, and quality of K2 Systems products

Eclipse MDI | San Jose, CA

June, 2019 – September 2020

Mechanical Engineering Intern – Managed 3 separate projects within Design and Manufacturing

- Invented and led design of a fixture that could efficiently and accurately cut tunnel diode leads with ease. Removed the need to cut leads individually by hand, saving time in the fabrication process and eliminating room for human injury and error
- Presented final fixture design to the CEO and Executive Staff
- Completed Engineering Change Orders (ECOs) using AutoCAD to clean and update detailed drawings in order to meet new dimensional sheet protocol specifications and clarify directions for fabrication
- Responsible for following clean lab procedure while labeling and quality assuring serial numbers on semiconductor and microwave devices including power modules, frequency doublers, mixers, detectors, limiters and amplifiers

PROJECTS

Multi-Bit Insignia Screwdriver, Manufacturing Processes: Material Removal Final Project

Spring 2019

- Personally operated lathe, Haas CNC mill, and arbor press to tap holes, press fit, and surface finish each piece
- Ensured quality and proper fabrication of each component while executing end to end manufacturing processes

Logo Sand Casting, Manufacturing Processes: Net Shape

Winter 2019

- Hand fabricated a sand mold with a rubber mustang-shaped pattern and poured liquified aluminum base sheet metal
- Mastered and observed correct safety protocol for heating and handling molten metal to produce an optimal sand casting

SolidWorks Geneva Wheel, Introduction to Detailed Design

Fall 2019

- 3D Modeled, assembled, and conducted accurate simulated motion tests of multiple moving parts within SolidWorks
- Simulated sliding capabilities and correct physical fit of all mechanical elements of wheel

Surfboard Fabrication, Personal Project

Spring 2020

- Designing SolidWorks model to visualize curve and dimension specifications optimized for speed and mobility
- Preparing for fabrication within personal workspace to precisely shave, saw, and sand foam blank into new board

HONORS AND EXTRA-CURRICULARS

National Society of Collegiate Scholars Member: Organization that recognizes successful academic students

2019 – Present

Sales Engineering Club Member: Group collaboratively researches technical sales techniques and experience in industry **Delta Chi Academic Chair:** Mentored and led fraternity to place within top 3 for academic performance on campus 2020

2019 – Present 2020 – Present

Synopsys Silicon Valley Science and Technology Championship: 2nd Award, Physical Science and Engineering

Spring 2017

SVCC Science Fair Invitation: Selected by the Santa Clara Valley Office of Education to present at Comic Con

Spring 2017

SKILLS

Mechanical Design: Intermediate knowledge with SolidWorks, AutoCAD, Fusion 360 modeling programs, CorelDraw, operating laser cutters, manual and CNC lathes and mills; sand casting, arbor press, sketching, detailed drawings, sanding, shaving, liquifying metals **Computer/Programming:** MATLAB, Microsoft Office (Excel, Word, PowerPoint) **Languages:** English, conversational Spanish

INTERESTS

Robotics, Aerospace, Solar Energy, Satellite Design, Mechatronics, Advanced Prosthetics, Biomechanical engineering, Biomechatronics, Animatronics, Ocean Energy, Mechanical Design Engineering, surf, biology, sports