Ronnie Solanki

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Mechanical Engineer and management professional adept with utilizing leadership and creativity to solve complex engineering design problems. Developed specialties in unmanned systems and aerospace engineering design and analysis. Proven skills in 3D printing, rapid prototyping, manufacturing, and test engineering. Developing skills in machine learning.

EDUCATION

Master of Science in Unmanned Systems, 2019
Specialization in Aeronautics and Design
Embry-Riddle Aeronautical University, Worldwide campus
GPA: 4.00 (with Distinction)

Bachelor of Science in Mechanical Engineering, 2011
University of South Florida, Tampa, FL
GPA: 3.26

SKILLS

Software: SolidWorks, AutoCAD, LabVIEW, Microsoft Office, MATLAB, Creo, Autodesk Inventor, Fusion360, NumPy, Python, C++
Technical: Finite element analysis (FEA), geometric dimensioning and tolerancing (GD&T), milling, welding and machining

PROJECTS

Embry-Riddle Aeronautical University **Jan 2017 – Sep 2019**
Unmanned Systems Sensing, Perception, and Processing – Advancements in UAV Sensor Technology
- Conducted qualitative analysis of sensor technology in UAV's to determine viable options allowing for fully autonomous commercial UAV's with and without GPS. Provided recommendations to implement new microwave radar (Aerotenna's μSharp) over current LiDAR and ultrasonic sensors and implement PixMap's Reality Capture technology to maintain autonomy without GPS

Aircraft Design & Development - What Makes the MQ-9 Reaper the Prominent Hunter-Killer Drone?
- Performed a comparative design analysis of MQ-9 Reaper and predecessor MQ-1 Predator. Analyzed Reaper's design goals, top-level requirements, trades made to achieve optimum design and evaluated final design effectiveness. For future iterations recommended: upgraded autonomous capabilities, stealth capabilities, enhanced flight control algorithms, enhanced sensors, longer range, and increased payload capacity

University of South Florida, Tampa, FL **Jan 2009 – Dec 2011**
Capstone Design - Automated Floor Cleaner for physically disabled individuals
- Led a team of 4 engineers to design and manufacture an all-in-one robotic system that used steam to clean floors. Developed 2D conceptual designs using SolidWorks to determine machine size and omni- directional movement

Kinematics and Dynamics of Machinery - Electric Garden Shear
- Generated 2D and 3D manufacturing and conceptual drawings using SolidWorks to determine solid model, movement, and material. Collaborated on fabrication of final working design based on Dynamic Crank Slider design

WORK EXPERIENCE

Lionbridge Technologies, Remote **May 2020 – Present**
Internet Assessor
- Analyzed and provided quality assurance feedback on search engine queries.
- Consistently maintained a 90%-95% accuracy rating

Safran Electrical and Power, Sarasota, FL **Sept 2018 – Dec 2018**
Test Manufacturing Engineering Intern
- Developed and fabricated an automated epoxy dispenser for production floor to increase process efficiency
- Designed, fabricated and tested an automated test equipment (ATE) to perform push/pull tests of circuit breakers coming off 700, 1200 and 3-phase lines to determine they passed force required to trip breaker. Fabricated acrylic temperature control enclosures for ATE to optimize test engineering
- Utilized Creo to 3D print prototypes, components, tools and fixtures for development and production projects

Tilly's, Tampa, FL **Nov 2015 – Aug 2016**
Assistant Manager
- Prepared deposits and staff schedules, adjusted sales floor coverage based on business needs
- Achieved 10% increase in store sales within 3 months of start by directing 21 associates on communication strategies

Vans, Tampa, FL **Aug 2013 – Nov 2015**
Floor Supervisor/Manager
- Reconciled registers, prepared deposits, drove sales to exceed plan
- Coached a team of 10 associates to achieve maximum productivity- led to an average sales increase of 2% from LY