

Ryan A Downey

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Qualifications Summary

- Utilize SolidWorks to design and create drawings for real life applications for projects and related course work
- Extensive experience with MATLAB and Microsoft Products for course work and data analysis applications
- Strong written and verbal communication skills in classroom and professional settings
- Ability to multi-task in a fast-paced work environment with limited supervision
- Acquired leadership experience among diverse teams through engineering projects and previous positions
- Experience interfacing with customers and management
- Self-starter with the ability to independently pursue information and solve problems

Education

Northern Arizona University:
Bachelor of Science – Mechanical Engineering, Honors

Expected, May 2022
GPA: 3.81/4.0 (Dean's List)

Relevant Course Work

ME495 Experimental Methods of Thermal Sciences, Northern Arizona University January 2022 – Present

- Set up and design experiments to test and verify hypotheses through data acquisition and analysis
- Perform experiments to gain hands on experience with lab equipment to collect, interpret and verify findings
- Complete technical data analysis throughout the semester to analyze data and perform error analyses
- Compose professional reports to accompany and convey results from labs to explain data collection and results
- Establish a working knowledge of experimental design, data collection and analysis with applications in the thermal and fluid sciences
- Design, build and test original experiments to examine an underlying physical phenomenon that can be understood and explained based on knowledge of Thermodynamics

SAE Micro Aero Competition: Test Engineer, Northern Arizona University August 2021 – Present

- Serve as test engineer on a Capstone team designing an RC airplane to compete in the SAE Micro Aero's regional competition in April
- Collaborate as a team to ensure productivity, innovation and progress is made so project requirements are met or exceeded
- Work alongside Novekinetics AeroSystems to manufacture carbon fiber for airfoil and fuselage sub systems
- Complete self-learning and technical analysis to further knowledge of design and verify system validity
- Design, build, and test performance of prototypes to evaluate validity of the design and how it meets engineering and customer requirements
- Create spreadsheets and Matlab codes to collect and interpret data from testing to numerically validate requirements are met
- Develop, prepare, and present technical to show project progress to peers, stakeholders, and professors

Experience

Ambassador/Orientation Leader, University Admissions- Northern Arizona University October 2018 -Present

- Interact with guests and perspective families to the university, providing excellent customer service through giving tours, providing quality information about the university, and engaging in conversations
- Train and lead new hire ambassadors to accomplish office tasks and preparation for high volume event days for perspective families and students
- Serve on a committee to plan and equip ambassadors with information to ensure successful student orientations
- Resolve issues or problems guests encounter on event days on a case-by-case basis
- Front face representative of the university being the first point of contact that families have when visiting the university, and leaving a lasting impression of inclusion, diversity, and a welcoming environment.
- Aid in preparation and logistics for large event days and campus visits to provide the most efficient flow of events in the day for guests and ambassadors