

## Education:

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- **The University of Akron College of Engineering, Akron, Ohio**  
Bachelor of Science in Aerospace Systems Engineering expected May, 2017  
Grade Point Average: 3.5/4.0  
President's List (College of Engineering)  
Pratt and Whitney Scholarship

## Work Experience:

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### NMG Aerospace, Stow, Ohio

[1/2013 – 8/2016]

*NMG Aerospace provides world class engineering, manufacturing and logistics solutions for global leaders primarily in Aerospace and Industrial markets. They combine innovative engineering solutions, a global supply chain, LEAN manufacturing, and creative logistic services to deliver integrated solutions to clients throughout the world. In the aerospace market, NMG delivers products to the Undercarriage, Ice Protection, Specialty Seating, Evacuation, and Water segments.*

### Mechanical Engineer Co-op

(5/2014 – 8/2016)

- Structure analysis of water tanks using finite element analysis
- Mobile water system design for product showcasing
- De-icing manifold testing for qualification of products
- Use of CAD software for parts, assemblies, and drawings
- Worked with program manager on project planning and project status reports
- Revise test procedures for reduction of time spent testing
- Write technical documentation and reports for proposal and qualification packets

### Quality Engineer Co-op

(1/2013 – 5/2014)

- Design of database used for tracking quality issues throughout company
- Internal audits of work areas per AS9100C
- Increase product workflow and cost savings using continuous improvement techniques
- Perform PFMEA on manufacturing process of F-35 components
- Identify manufacturing processes with highest scrap and rework costs per month

## Projects:

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### Senior Design Project – Project Management of Advanced Rocket

- Lead a group of students working on individual senior designs for a common goal of designing a rocket
- Create guidelines for managing future projects on the university rocket team
- Apply systems engineering principles for decision making
- Maintain budget and timeline

### Course Project – Heavy-Lift Wing for RC Airplane

- Takeoff, landing, and stability performance calculations of airplane
- Landing gear and wing structure re-design for flight and landing conditions
- Payload bay for location and weight adjustments

### Design Team Project – Passive Guidance of Rocket

- Trajectory simulations for alternative fin and nose cone designs
- Use of computational fluid dynamics for analysis of various important flight conditions
- Various methods of attaching fins and nose cone to rocket

# Emery A. Rowe

Phone: 440-724-6360

Email: EAR64@zips.uakron.edu

306 Northeast Ave., Apt. F204 – Tallmadge, OH – 44278

## Activities and Interests:

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- Chief Engineer of Akronauts – Rocket Design Team of the University of Akron (2016 – Present)
- Intercollegiate Rocket Engineering Competition (2015 – Present)
- NASA Student Launch Competition (2017)
- Thermal and Fluids Analysis Workshop organized by NASA – Cleveland, OH (2014)

## Skills:

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**Software:** ANSYS, AutoCAD, BurnSIM, PTC Creo, Fluent, Inventor, LabVIEW, MATLAB, Microsoft Office, Solidworks, Visual Studio

**Computer Languages:** C#, C++, Java, VBA

## Coursework:

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Aerospace Computations, Avionics, Fundamentals of Flight, Aerospace Propulsion, Thermal System Components, Compressible Fluid Mechanics, Aerodynamics, Aerospace Materials, Aerospace Systems Engineering, Design of Mechanical Components, Aerospace Structures, Engineering Management and Leadership