

**William Joseph Koehrsen**  
Huntsville, AL • wjk68@case.edu • (309)-453-1529  
LinkedIn: <https://goo.gl/5Ob9h8>

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## EDUCATION

**Case Western Reserve University**, Cleveland, OH

**Bachelor of Science in Engineering, Aerospace**

Expected Graduation: **May 2018**

**Bachelor of Science in Engineering, Mechanical**

Cumulative GPA: **4.00**

**Master of Science in Engineering, Aerospace**

Expected Graduation: **December 2018**

**Udacity Data Analyst Nanodegree**

**GitHub Portfolio:** <https://goo.gl/mc5p4N>

**Relevant Coursework:** Aero/gas dynamics, mechanical design and analysis, fluid mechanics, numerical methods, heat transfer, flight mechanics, orbital dynamics, statics, fluid thermal elements, aerostructures

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## WORK EXPERIENCE

**NASA Aerospace Engineer Intern**, Huntsville, AL

**January 2017-Present**

- Worked on guidance, control, and mission analysis for NEA Scout satellite launching on EM-1
- Responsible for validation of Attitude Control Matlab/Simulink model and hardware/sensors tests
- Developed scripts to model mission concept of operations in MATLAB and Python

**Air Force Research Lab Aerospace Researcher Intern**, Kirtland AFB, NM

**June – August 2016**

- Developed and ran supersonic CFD simulations on aircraft geometries in OpenFOAM/CFD++
- Designed CAD model and oversaw fabrication of experimental testing equipment currently in use
- Wrote MATLAB and Python code to analyze experimental data from wind tunnel testing

**Private Tennis Instructor**, Metamora, IL

**Summers 2012-2015**

- Trained several dozen high school varsity level tennis players and managed extensive schedule
  - Certified Illinois High School Association tennis coach, volunteer assistant at local high school
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## LEADERSHIP/ EXTRACURRICULAR ACTIVITIES

**Baja SAE Team**, Case Western Reserve University

- Design and fabrication engineer on top-25 nationally placing rally car design and build team
- Designed, CAD modeled, and fabricated steering/suspension subsystem in eight months

**NASA Robotic Mining Competition Team**, Case Western Reserve University

- Developed, modeled, and worked on construction of excavation system mechanical components

**Design-Build-Fly Team**, Case Western Reserve University

- Designed CAD model of aircraft fuselage for national AIAA design and fabrication competition
- Oversaw successful fabrication and flight testing of aircraft

**Civic Engagement and Learning Scholar**, Case Western Reserve University

- Leader of weekly volunteer group to Case Western University farm, 60+ hours of service per year
  - Honored by Center for Civic Engagement and Learning for service and community involvement
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## PRESENTATIONS/ PUBLICATIONS

- Koehrsen, W. J., and Tam, C.-J., “Design of a Water Table for Qualitative Flow Visualization Around Hemispherical Turret” presented at the DEPS Systems Symposium in September 2016
  - Koehrsen, W. J., and Tam, C.-J., technical paper (title sensitive) presented and published at the JANNAF Modeling and Simulation subcommittee meeting in December 2016
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## TECHNICAL SKILLS

- Working experience with Solidworks, Microsoft Office, Git, SVN, STK, CFD software
  - Proficient with Python, Matlab, and R for statistical analysis, modeling, and data visualization
  - Systems Tool Kit (STK) Master Certified; Solidworks CAD modeling software associate
  - Experienced with electronics, materials science, physics, and mechanical laboratory equipment
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## AWARDS

- Michelson-Morley STEM Scholarship recipient, Mortar Board honor society membership chair, Tau Beta Pi engineering honor society member, National Merit Scholar Commended
- Competitive Ultramarathon runner: numerous podium finishes, personal best 66 miles in 12 hours