William Joseph Koehrsen
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LinkedIn: https://goo.gl/5Ob9h8

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/eOGnvA

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

WORK EXPERIENCE

NASA Aerospace Engineer Intern, Huntsville, AL **January 2017-Present**
- Worked on guidance, control, and mission analysis for NEA Scout mission launching on EM-1
- Responsible for verification and validation of guidance and control Matlab/Simulink model
- Performed data analysis and numerous trade studies for solar sailing missions using 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

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 the 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

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

TECHNICAL SKILLS

- Working experience with CFD software, Solidworks, Microsoft Office, Git, SVN, STK
- Proficient with Python, Matlab, and R for statistical analysis, modeling, and data visualization
- Systems Tool Kit (STK) Master: Level 2 certified; Solidworks CAD modeling software associate
- Experienced with electronics, materials science, physics, and mechanical laboratory equipment

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