

Micah Best

Mechanical Engineering Undergraduate
Texas A&M University

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EDUCATION

Degree	Institute	GPA	Year
B.S. Mechanical Engineering	Texas A&M University	3.0 (Current)	2019-Present

EXPERIENCE

- Texas A&M University** *Aug. 2022 - Present*
Undergraduate Student Researcher College Station, TX
 - Continued research in Molten Salt Reactors, specifically the Molten Salt Research Reactor (MSRR).
 - Further developing SyTH project to analyze and visualize the components and system of the reactor. Analysis is performed using FEA and results are visualized using VTK.
- Veracity Nuclear, LLC** *June 2023 - November 2023*
Independent Contractor Knoxville, TN
 - Developed Python software, rxView, to visualize results from Shift and OpenMC outputs in VTK format.
- Oak Ridge National Laboratory** *June 2023 - July 2023*
Science Undergraduate Laboratory Internship (SULI) Program Knoxville, TN
 - Modeled aerodynamic drag coefficient of autonomous heavy-duty truck platoons
 - Created model to predict drag coefficient values for implementation with control systems to improve fuel economy
- University of Texas** *June 2022 - Aug. 2022*
Mechanical Engineering Summer Intern Austin, TX
 - Developed a program called SyTH to analyze the thermal-hydraulics involved within MSRR, a nuclear reactor. The program solves the thermal-hydraulic system by calculations and visualizes the results in VTK format.
 - Worked alongside the Senior Research Fellow to learn more about thermal hydraulics and software development.
- Forsythe Brothers Infrastructure** *June 2021 - Aug. 2021, Dec. 2021 - Jan. 2022*
Civil Engineering Internship Manor, TX
 - Achieved proficiency in the use of construction equipment such as using excavators and back-hoes
 - Communicated with contractors and inspectors to ensure that work met required specifications
 - Worked directly with a Civil Engineer to learn surveying and other relevant skills
- Texas A&M University Transportation Services** *Jan. 2020 - Aug. 2022*
Student Bus Driver College Station, TX
 - Transport Passengers on predetermined routes while following local traffic regulations
 - Adhered to company-determined schedules and routes to ensure timely arrivals and departures
 - Performed all duties with personable communication and professionalism, including bus operation and passenger interaction

PROJECTS

- SyTH - System Thermal Hydraulics** *June 2022*
Software that developed to solve nuclear reactor systems and visualize the results
 - Tools & technologies used:** Python, C++, Visualization Took Kit (VTK)
- Senior Design Project** *January 2023*
Designing an airfoil for a VTOL UAV for the Office of Naval Research and the Army Research Lab
 - Tools & technologies used:** CFD, CAD, Wind Tunnel Testing
- SULI Internship Project** *June 2023*
Drag Coefficient Modeling of Heavy-Duty Vehicle Platooning using System Identification
 - Tools & technologies used:** Python, Machine Learning

PUBLICATIONS

- Best, M., Kitamura, A., Collins, B., and Kimber, M., "Conjugate heat transfer with heat generation in both solid and fluid domains," 17th International Heat Transfer Conference, August 14-18, 2023, Cape Town, South Africa.

TECHNICAL SKILLS

- Programming:** Python, C++, CMake, JSON, HDF5
- Tools & OS:** GitHub, Linux, Finite Element Analysis, Computational Fluid Dynamics, Computer Aided Design
- Libraries/Frameworks:** Numpy, Scipy, Scikit-learn, pytest