JACK ROWE

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CAREER GOAL – Solve complex science, technology, engineering, and math problems to advance the understanding of our universe and improve the sustainability of our world.

CAREER INTERESTS – Research and Development, Computational Engineering, Computational Physics & Chemistry, Quantum Engineering, Mathematical Modeling, Computer Simulation, Machine Learning & Artificial Intelligence, Meteorology, Virtual & Augmented Reality

EDUCATION – Current student at The University of Texas at Austin
Cockrell School of Engineering, Computational Engineering, Class of 2026, 3.60 GPA
Boerne High School, Honors Graduate, Class of 2022, Summa Cum Laude, 4.00+ GPA
4+ years of college-level S.T.E.M. equivalent coursework completed:

- Scientific Computation and Application of Supercomputing
- Linear & Nonlinear Systems of Equations Programming
- Differential, Integral, & Multivariate Calculus
- Engineering Statics & Thermodynamics
- Differential Equations with Linear Algebra
- General Chemistry 1, 2, & Organic Chemistry 1
- Engineering Physics (Mechanics & Electromagnetism)
- Mechanical Engineering Design & Manufacturing

EXPERIENCE – 2015 to 2023
Computer Programming, Development, and Analysis:

- 2+ years of C++, C#, and MatLab
- 6+ years of Java
- 7+ years of SkriptLang
- 4+ years of commissioned software development
- 7+ years of programming tutorial development
- 8+ years public server development & management

1+ years designing & manufacturing with SolidWorks, Cura, & Fusion 360
3+ years of Math, Chemistry, Physics, and general science tutoring
Community & Team Leader of UT Austin's Virtual Reality Esports Team
Familiar with all Microsoft Office 365 & Google Suite Programs

PROJECT LIST

- Designed a virtual pathogen spread, mutation, and natural selection computer simulation
- Developed a fractal rendering engine compatible with and optimized for complex numbers
- Launched a successful online store and website to compliment a public game server
- Designed a storm and tornado simulation game using data from NOAA's Storm Prediction Center
- Founding team member of UT Austin's virtual reality Esports Arena sponsored by Alienware
- Design of a cloud chamber particle visualizer for cosmic rays & radioactive isotope decay
- Application of descriptive statistics for the measurement of electromagnetic radiation
- Authored and architected computer programming tutorials for a user base of 300,000 people

ACHIEVEMENTS
2022 Texas Academic UIL:

- Computer Science Regional Finalist
- Mathematics Regional Finalist
- Physics State Finalist
- Science State Bronze Medalist
- Chemistry State Silver Medalist
- District Champion (Chemistry, Physics, Math)

2021 Minehut Software Hackathon Gold Medalist in Best Custom Software Plugin