

# JACK ROWE

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

**CAREER INTERESTS** – Research, Design and Development, Computational Engineering, Data Science, Computational Physics & Chemistry, Materials Science, Mathematical Modeling, Computer Simulation, Machine Learning & Artificial Intelligence, Meteorology

**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
- 3+ years of college-level S.T.E.M. equivalent coursework completed:
  - Procedural & Object-Oriented Computer Programming
  - Linear & Nonlinear Systems of Equations Programming
  - Differential, Integral, & Multivariate Calculus
  - Differential Equations with Linear Algebra
  - General Chemistry 1, 2, & Organic Chemistry 1
  - Physics 1 Mechanics, Engineering Physics 1
  - Mechanical Engineering Design & Manufacturing

**EXPERIENCE** – 2016 to 2023

- Computer Programming, Development, and Analysis:
  - 1+ years of C++, C#, and MatLab
  - 4+ years of commissioned, freelance software (plugins)
  - 5+ years of Java
  - 6+ years tutorial creation & publishing
  - 7+ years public server development & management
- 1+ years designing & manufacturing with SolidWorks, Cura, & Fusion 360
- 3+ years of Math, Chemistry, Physics, and general science tutoring
- 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 using data from NOAA's Storm Prediction Center

**ACHIEVEMENTS**

- 2022 Texas Academic UIL:
  - Computer Science Regional Finalist
  - Mathematics Regional Finalist
  - Physics State Finalist
  - Science State Bronze Medalist
  - Chemistry State Silver Medalist
- 2021 Minehut Software Hackathon Gold Medalist in Best Custom Plugin