



Skills

Python – 6 years

C – 3 years

HTML/CSS – 3 years

Java – 2 years

Git – 2 years

MATLAB – 2 years

C++ - 1 year

X86 Assembly – 1 year

Concurrent Programming – 1 year

Agile Development Methodologies – 1 year

Links

Webpage:

espeer5.github.io/ESpeer/index.html

LinkedIn:

www.linkedin.com/in/e-speer

Edward Speer

Computer Science Student at Caltech

📍 Pasadena, CA

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Education

California Institute of Technology (Caltech)
2021-2025

Computer Science Major, Control and Dynamical Systems Minor
GPA: 4.1
Advanced Coursework: Data structures, Systems Programming, Multithreaded Programming, Embedded Systems, CPU Design, Software Design, Solid State Digital Electronics, Applied and Computational Linear Algebra
Activities: Intercollegiate Baseball Athlete

Experience

Texas Department of Transportation
Austin
Summer 2022

Engineering Support Intern

- Management – Oversaw the management of the TxDOT IT Infrastructure and Operations project portfolio, implementing Agile Development methodologies in work across multiple districts and divisions throughout the state. Managed the fulfillment of IT service requests through an ITIL service model for network and server teams across both business and traffic networks, increasing public value
- Development – Built database reporting tools and dashboards to increase visibility of project metrics and data for TxDOT leadership and the public
- Team Lead – Served as a team lead for the all-intern content development team in producing an employee self-help web service based around mobility tools.

California Institute of Technology
Pasadena
Fall 2022

Teaching Assistant – Introduction to Computer Programming

- Teaching – Instructed students in the fundamentals of computer programming based in data science topics in Python. Lead students toward proficiency in IDEs and debugging tools, program and object-oriented design, open-source software packages, and version control.
- Development – Built, revised, and edited starter code, grading scripts, and requirements documents for students to complete, then assessed and provided feedback on students' ability to fulfill requirements to maximize student value

Self Employed
Remote
2019-Present

Remote STEM tutor

- Education – Instructed students in a wide range of STEM subjects emphasizing calculus, computer programming, and physics
- Communication – Demonstrated ability to communicate with students to understand their needs and tailor my services to their desired user experience and maximize client value

Certifications / Awards

IBM Design Thinking Practitioner
July 2022

This certification is earned by completing a course in IBM design thinking methods, teaching user-centered design methodologies. The course focuses on maximizing client value by working with sponsor users from beginning to end of product design and development.

IBM Watson Memorial Scholarship
2021-2025

A scholarship for students of high achievement going on to complete an undergraduate degree in a technical field.

National Merit Program Finalist
2021

Awarded to students whose scores on standardized tests rank within an elite percentile in their state. In Texas in 2021 I scored within the top 1% of test takers