Benjamin Webster

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EDUCATION

Bachelor of Science, Willamette University, Salem, OR   May 2027
Majors: Computer Science, Data Science
Minor: Mathematics

PUBLICATIONS

Cordova, L., Mendoza, T., Holmes, S., Megginson, K., **Webster, B.**, & Gregory, D. (2025). Not All Chatbots Teach: Evidence for Pedagogical Design in AI-Assisted Technical Education. *To be presented at the ACM SIGCITE 2025 Conference, November 2025.*

EXPERIENCE

Undergraduate Research Assistant | *Willamette University, Salem, Oregon*   (Feb 2025 - Present)
- Co-developed *Pedalogical*, a full-stack educational platform leveraging AI to enhance learning in technical subjects.
- Engineered metacognitive scaffolding within a Large Language Model by implementing structured prompts grounded in the Feynman Technique and learning science literature.
- Built and maintained the platform utilizing a tech stack including C#, .NET, Blazor, and PostgreSQL.

QUAD Center Tutor | *Willamette University*, Salem, Oregon   (Aug 2024 - Present)
- Guided 15+ undergraduate and graduate students per week through complex Computer Science and Data Science concepts, including data structures, algorithms, and statistical analysis, to strengthen foundational skills and promote academic success.
- Analyzed student feedback and session data to identify learning trends, leading to the refinement of tutoring strategies for core Computer Science topics.

Willamette Datafest 2025 | *Willamette University,* Salem, Oregon   (April 2025)
- Awarded **Best Use of External Data** by integrating commercial electricity rate data with a proprietary real-estate dataset to identify key markets for strategic investment.

Willamette Datafest 2024 | *Willamette University,* Salem, Oregon   (April 2024)
- Won **Best Data Visualization** among regional university teams by utilizing advanced analytics to uncover and communicate key findings from a large proprietary dataset.

Scenic Studio Technician | *Willamette University*, Salem, Oregon   (Sept 2023 - Present)
- Translated complex design schematics into large-scale theatrical sets, fabricating components from wood, steel, and plexiglass for four productions annually.
- Partnered with a cross-functional team of faculty directors, designers, and technicians to execute the technical implementation of large-scale scenic designs.

SKILLS

Programming Languages: Python, C#, C, R, HTML, JavaScript
Data & Visualization Libraries: Pandas, Numpy, Matplotlib, OpenCV, Tidyverse
Developer Tools & Tech: Git/Github, .NET, Blazor, LaTeX, Unity, Linux