

Brandon Odom

Software Engineer

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📍 Austin, Texas

PROFESSIONAL EXPERIENCE

Fullstack Software Engineer

Nov 2024 - Present

Freelance

- Leading the end-to-end website redesign for a B2B industrial metal products company as the sole engineer and designer, replacing an outdated legacy platform
- Designing the full user experience and a modern, responsive interface from scratch
- Building a searchable product catalog with technical specifications and direct online ordering
- Creating quote-request and contact forms that route customer inquiries to the sales team
- Integrating a headless CMS so the business can manage products and content without a developer

Career Break

Jul 2022 - Nov 2024

Family Caregiving

- Relocated home to provide care for an aging family member during a period of medical need; returned to software engineering in 2024

Software Development Engineer

Sept 2019 - Jul 2022

Amazon Web Services

- Became AWS CodeStar's primary engineer in just five months, maintaining the live service through patches and version upgrades
- Created and maintained 40+ project templates that helped CodeStar users bootstrap new projects
- Served as CodeStar's org-wide point of contact, fielding functionality, compliance, and security questions from teams across Amazon
- Contributed to CodeCatalyst, CodeStar's successor, influencing blueprint design and building internal tooling
- Partnered with the region-build team to expand CodeStar to an additional AWS region
- Resolved critical security issues and maintained runbooks, scripts, and wikis while serving in the on-call rotation

Graduate Research Assistant

Jan 2016 - Dec 2017

Student Worker

May 2014 - Dec 2015

Center for Advanced Vehicular Systems

- Built the ANVEL-ROS bridge, exchanging video, sensor data, and control commands between the ROS framework and the ANVEL simulator in real time
- Validated ANVEL's simulation accuracy by running identical commands on a physical robot and its digital twin
- Designed user interfaces for human-factors studies on robot teleoperation, measuring how different designs affected operator performance

IT Intern

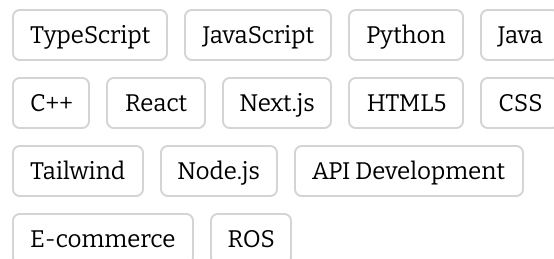
May 2012 - Jul 2012; May 2013 - Jul 2013

St. Stanislaus College

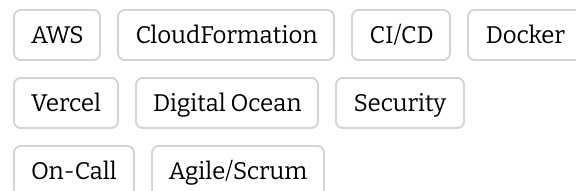
- Set up a computer lab from scratch, cloning drives and standardizing configurations across every machine
- Upgraded hardware and software across lab, teacher, and faculty computers campus-wide
- Onboarded teachers onto the PowerGrade grading system, creating and configuring their accounts

SKILLS

Development



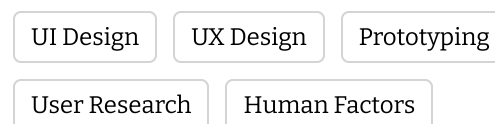
Cloud & DevOps



Tools & Services



Design & Research



EDUCATION

MS in Computer Science · Artificial Intelligence 2015 - 2017
Mississippi State University

- Master's Project, "Therabot UI": designed and built a human-friendly interface for Therabot, a robotic therapy dog for children
- Researched under Prof. Cindy Bethel, co-authoring peer-reviewed publications
- Completed a directed study with Prof. Chris Archibald, migrating the database and modernizing his CueCard pool simulator to a current Python release

BS in Computer Science · Minor in Cognitive Science 2011 - 2015
Mississippi State University

- Member of the Social, Therapeutic, and Robotic Systems Lab (STaRS Lab)

PUBLICATIONS

"Therabot™: A Robotic Support Companion" 2018

Darrow, Sarah, Aaron Kimbrell, Nikhil Lokhande, Nicholas Dinep-Schneider, T. J. Ciufo, **Brandon Odom**, Zachary Henkel, and Cindy L. Bethel. "Therabot™: A Robotic Support Companion." In Companion of the 2018 ACM/IEEE International Conference on Human-Robot Interaction, pp. 37-37. ACM, 2018.

"ANVEL-ROS: The integration of the robot operating system with a high-fidelity simulator." 2015

Hudson, Christopher R., Alexander Lalejini, **Brandon Odom**, Cindy L. Bethel, Daniel W. Carruth, Phillip J. Durst, and Christopher Goodin. "ANVEL-ROS: The integration of the robot operating system with a high-fidelity simulator." In Proceedings of the Ground Vehicle Systems Engineering and Technology Symposium, p. 378. 2015.