Josh Bedwell

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Education

University of California at Berkeley

Expected May 2025

M.S. in Molecular Science and Software Engineering

Berkeley, CA

Brigham Young University

Apr 2023

B.S. in Computer Science, emphasis in Software Engineering

Provo, UT

Experience

Research Assistant, Brigham Young University - Provo, UT

Jan 2021 - May 2023

- Co-author of papers in chemical engineering and human-computer interaction labs
- Refactored, modularized, and tested a new combustion simulation library, enabling publication
- Performed data analysis, including natural language processing, for publications focused on cross cultural interactions and user privacy behavior
- Led prototyping and development of neurodiverse friendly social platform features
- Designed and deployed a lab website, displaying team members and projects for an extensive lab

Academic Tutor, Utah Valley University – Orem, UT

Jan 2022 – May 2022

Provided individual academic support for undergraduate computer science courses

Teaching Assistant, Brigham Young University – Provo, UT

Aug 2019 – Apr 2021

- Provided lab and tutorial sessions for chemical engineering scientific programming course
- Provided individual academic support in computer science courses including Intro to Programming, Algorithms and Data Structures, and Discrete Structures

Publications

Garret, Smith, **Bedwell, Joshua**, et al. 'I know I'm being Observed:" Video Interventions to Educate Users about Targeted Advertising on Facebook'. *Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems*, Association for Computing Machinery, 2024, https://doi.org/10.1145/3613904.3642885. CHI '24.

Mondal, Mainack, **Bedwell, Joshua**, et al. 'A Tale of Two Cultures: Comparing Interpersonal Information Disclosure Norms on Twitter'. *Proc. ACM Hum. -Comput. Interact.*, vol. 7, no. CSCW2, Association for Computing Machinery, Oct. 2023, https://doi.org/10.1145/3610045.

Stephens, Vibtoria B., **Bedwell, Joshua**, et al. 'SootLib: A Soot Model Library for Combustion Simulation'. *SoftwareX*, vol. 22, Elsevier, May 2023, https://doi.org/10.1016/j.softx.2023.101375.

Projects

Capstone Project – Partners Personnel

- Architected web-based ETL application to succeed aging MS Access program
- Integrated authentication with existing Azure AD solution
- Designed node-based pipeline architecture, enabling unit testing, serialization, and meeting per-client needs
- Integrated administrative documentation including dynamically generated content
- Deployed via Django with simple and robust client front end

Skills

Languages: Python (Django), C, C++, Java, Swift (SwiftUI), Rust, JavaScript **Services:** AWS (DynamoDB, API Gateway, Lambda), GitHub Actions CI/CD

Technical Methodologies: Agile Development, Scientific Computing, Data Analysis