Allison Austin

https://allieaus.github.io   Los Angeles, California, USA

Education	**California State University, Long Beach**	August 2019-May 2023

Bachelor of Science, Computer Science GPA: 3.93/4.0

Under Review

B. Fu, **A. Austin**, and M. Garcia. *Visualizing Mappings Between Pairwise Ontologies - An Empirical Study of Matrix and Linked Indented List in Their User Support During Class Mapping Evaluation.* Submitted to International Semantic Web Conference (ISWC '23).

Presentations

Undergraduate Research Experience. CSULB College of Engineering and College of Natural Sciences and Mathematics Transfer Student Panel, 2023.

WeCasa: A home organized. CSULB Undergraduate Computer Engineering and Computer Science Senior Expo, 2023.

Research Experience

CSULB Data Semantics and Human-Data Interaction Lab   August 2022-May 2023

Worked on *Visualizing Mappings Between Pairwise Ontologies* as the lead researcher second author with Dr. Bo Fu.

- Conducted user study of the matrix and the linked indented list visualizations in their visual support for users during human evaluation of class mappings established between pairwise ontologies.
- Designed and executed task-based experiments with 81 participants while obtaining data from Gazepoint eye tracker.
- Evaluated the extent to which a given visualization supports recognition of visual cues, validation of existing mappings, and creation of new results using eye tracking data, task success, and task completion time.

Academic Projects

CECS 327 Introduction to Networks and Distributed Computing   Fall 2022

- Researched solutions to query processing on heterogeneous data stores (data federation/ontology-based data access/tensors).
- Worked with undergraduate student peers and Professor Malik Luti to develop a query execution engine similar to BigDAWG.

CECS 456 Machine Learning   Spring 2022

- Implemented Cox Regression to predict survival probabilities of death events from heart failure dataset.
- Plotted Kaplan-Meier Fitter of different features to test significance of variables.
- Analyzed the cost/benefit of using baseline hazard function in Cox model.

Industry Experience

Amazon   May 2022-August 2022

Data Engineer Intern

- Migrated large-scale ETL pipeline to Native AWS for real-time workforce management and analytics software.
- Designed and implemented upsert logic for updating agent statistics table.
- Translated existing ETL jobs into one merged Glue job that handles the processing of three different streams.
- Automated workflow using CI/CD pipelines for deploying AWS resources (Kinesis Stream, Glue Streaming jobs, Glue tables, S3 buckets).
- Received a full-time offer from the Partner Support and Solutions (PSAS) team.

Nihon Kohden Digital Health Solutions   May 2021-August 2023

Data Engineer Intern

- Enhanced the usability and improved the performance of real-time and historical medical data visualization applications.

- Optimized queries to data warehouse and data lake for viewing and extracting patient data.
- Designed and prototyped a web application for viewing and analyzing alarm data with aggregated metrics and interactive UI components.
- Researched methods of fitting time-series data and classification of alarm thresholds for optimizing vital sign alarms.
- Assisted in patent approval process for work on alarm simulation feature.

Awards	2022 California State University's Program for Education and Research in Biotechnology (CSUPERB)

Community Involvement	2023 BEACH Women in Engineering Conference, *Volunteer*	April 2023
	CSULB Women in Computing (WiC) Sisterhood, *Mentor*	August 2022-May 2023
	2022 BEACH Women in Engineering Conference, *Volunteer*	April 2022
	Mathematics, Engineering, Science Achievement (MESA), *Volunteer*	March 2022
	Louis Stokes Alliance for Minority Participation (LSAMP), *Member*	February 2022-May 2023
	CSULB CS Undergraduate Student Advisory Board, *Volunteer*	February 2022
	CSULB Women in Computing (WiC), *Treasurer*	August 2021-May 2022
	MarinaHacks, *Design Committee Volunteer, Sponsorship Committee Lead*	January 2021

References	**Dr. Bo Fu** Boeing Endowed Professor of Computer Science at CSULB, **Email:** bo.fu@csulb.edu
	Prof. Malik Luti Adjunct Professor of Computer Science at CSULB, **Email:** malik.luti@csulb.edu
	Dr. Mehrdad Aliasgari Department Chair, CECS at CSULB, **Email:** mehrdad.aliasgari@csulb.edu