

Allison Austin

<https://allieaus.github.io>

Los Angeles, California, USA

Education	California State University, Long Beach Bachelor of Science, Computer Science GPA: 3.93/4.0	August 2019-May 2023
Publications		
Under Review	B. Fu, A. Austin , and M. Garcia. <i>Visualizing Mappings Between Pairwise Ontologies - An Empirical Study of Matrix and Linked Indented List in Their User Support During Class Mapping Evaluation</i> . Submitted to International Semantic Web Conference (ISWC '23).	
Presentations	<i>Undergraduate Research Experience</i> . CSULB College of Engineering and College of Natural Sciences and Mathematics Transfer Student Panel, 2023. <i>WeCasa: A home organized</i> . CSULB Undergraduate Computer Engineering and Computer Science Senior Expo, 2023.	
Research Experience	CSULB Human Semantics and Human-Data Interaction Lab Worked on <i>Visualizing Mappings Between Pairwise Ontologies</i> as the lead researcher second author with Dr. Bo Fu. <ul style="list-style-type: none">• 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.	August 2022-May 2023
Academic Projects	CECS 327 Introduction to Networks and Distributed Computing <ul style="list-style-type: none">• 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 <ul style="list-style-type: none">• 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.	Fall 2022 Spring 2022
Industry Experience	Amazon Data Engineer Intern <ul style="list-style-type: none">• 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 DJS 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).• Discovered solution for deploying streaming jobs using existing AWS CDK package—encouraging code reuse and avoiding unnecessary development.• Reduced management notification time from more than 5 minutes to less than 1 minute.• Received a full-time offer from the Partner Support and Solutions (PSAS) team.	May 2022-August 2022

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 alarm data and aggregated alarm metrics for data visualization and analysis.
- 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, <i>Student Volunteer</i>	April 2023
CSULB Women in Computing (WiC) Sisterhood, <i>Mentor</i>	August 2022-May 2023
2022 BEACH Women in Engineering Conference, <i>Student Volunteer</i>	April 2022
Mathematics, Engineering, Science Achievement (MESA) Program, <i>Student Volunteer</i>	March 2022
Louis Stokes Alliance for Minority Participation (LSAMP), <i>Member</i>	February 2022-May 2023
CSULB CS Undergraduate Student Advisory Board, <i>Student Volunteer</i>	February 2022
MarinaHacks, <i>Design Committee, Sponsorship Lead</i>	January 2021
CSULB Women in Computing (WiC), <i>Treasurer</i>	August 2021-May 2022

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

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