# Alexander Li

608-692-3058 | amli2@wisc.edu | linkedin.com/in/alexanderli523 | github.com/alexmli23

## Education

**University of Wisconsin - Madison** Madison, WI

*Bachelor of Science in Computer Science & Data Science* *May 2026*

- Relevant Coursework: Intro to Algorithms, Data Structures I, II, Linear Algebra, Intro to Computer Architecture

## Experience

**Software Engineer Intern** June 2024 - Present

*Wisconsin Athletics* *Madison, WI*

- Developed and implemented the frontend user interface for UWBadgers.com using jQuery, Bootstrap, and Gulp.js, enhancing website responsiveness and streamlining build processes
- Designed and implemented RESTful API with built-in form fraud protection, leveraging the .NET framework for robust and secure functionality
- Worked closely with a cross-functional team of 5 in daily stand-up meetings, providing clear updates on sprint priorities, addressing challenges, and ensuring alignment to maintain momentum. Leveraged GitHub for version control and Slack for seamless communication and collaboration

**Software Engineer Intern** May 2024 – August 2024

*Madison Bach Musicians* *Madison, WI*

- Utilized WordPress and integrated Square and MailChimp to develop a new website for Madison Bach Musicians to enhance the user experience and streamline interactions for over 1,000 customers
- Successfully migrated the database from Excel to Airtable, improving efficiency and data management for over 5,000 records
- Implemented automations to streamline data entry into Airtable, simplifying the process for managing concert dates, donation amounts, and ticket types (general vs. senior), enhancing overall efficiency
- Integrated a newsletter signup feature, implementing email capture functionality with backend integration for storing subscriber data in a relational database to facilitate digital email distribution

## Projects

**Census Data Analysis and Prediction for Wisconsin** | *SQLite, Geojson, Raster, GeoPandas*

- Utilized various data sources (geojson, shapefiles, SQL databases, and raster data) to extract, transform, and merge datasets for census analysis.
- Built and evaluated regression models to predict population based on geographic and housing features, achieving a variance explanation of over 0.35.
- Employed geographical data plotting with GeoPandas for visual analysis of census tract and county data.
- Conducted feature impact analysis and cross-validation to assess and improve model performance, demonstrating strong data manipulation and machine learning skills.

**Smart Marketing Classifier for Retail Website** | *Pandas, Numpy, Sklearn*

- Extracted and transformed features from user activity logs and demographic data, incorporating them into a machine learning pipeline.
- Implemented and fine-tuned models using Logistic Regression and other classification techniques to enhance marketing efficiency.
- Leveraged cross-validation and feature engineering to improve model performance and ensure robustness against noise in data predictions.

**Books Library** | *React, Node.js, Express.js, MongoDB, Tailwind*

- Created a web application that allows users to organize books
- Utilized MongoDB to store book information and which was tested with Postman
- Allows users to save books, authors and publish year, allowing users to switch between card and list view

## Technical Skills

**Languages**: Java, Python, SQLServer, JavaScript, HTML/CSS, R, C#
**Frameworks**: React, Node.js, JUnit, WordPress, BootStrap, TailWindCSS, .NET
**Developer Tools**: Git, Google Cloud Platform, VS Code, Visual Studio
**Libraries**: pandas, NumPy, Matplotlib