# Lien Zhu

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# Education

# Washington University in St. Louis, McKelvey School of Engineering

St. Louis, MO

Master's in Computer Science and Engineering, 4.0, BS/MS Program

January 2022 - May 2023/2024

#### Washington University in St. Louis

St. Louis, MO

Bachelor's of the Arts in Biology, 3.96

Aug. 2018 - May 2022

## Projects

## Message in a Flask | Python, Flask, Jinja, PostgreSQL

August 2022

- Designed and developed full-stack web app that implements message in a bottle concept
- Users can write messages and are presented with a random message from other registered users one at a time
- Users can archive messages they come across, removing the message from the pool of available messages
- Implemented with Flask using PostgreSQL following MVC architecture pattern
- Leveraged environment variables to deploy production quality app
- Visit messageinaflask.com

## Calendar | Linux, Apache, MySQL, PHP, JavaScript, AJAX

July 2022

- Designed and developed full-stack web app that allows registered users to add events, edit events, tag events under categories, share events, and share calendars with other registered users
- Full security considerations: session management, hashed passwords, CSRF tokens, etc
- Leveraged environment variables to deploy production quality app
- Check out my Calendar App

### Personal Website | HTML/CSS, JavaScript

• See more at https://lienzhu.dev

### Experience

# Teaching Assistant, CSE 247 Data Structures and Algorithms

August 2022 – Present

Washington University in St. Louis, McKelvey School of Engineering

St. Louis, MO

- Responsible for holding office hours 3+ hours per week with 20+ students per session
- Facilitate small group weekend problem solving sessions
- Develop analogies and visual aids to make challenging concepts easier to understand

#### Teaching Assistant, CSE 332S Object Oriented Software Dev. Lab

August 2022 – Present

Washington University in St. Louis, McKelvey School of Engineering

St. Louis, MO

- Oversee student learning through class time studio assistance and small group problem solving
- Assist students in learning C++ language features: memory management, environment set up, compilation, etc
- Responsible for holding office hours 6+ hours per week with 20+ students per session

#### Technical Skills

Languages: PHP, C++, C, Python, SQL, JavaScript, HTML/CSS, Java

Databases: PostgreSQL, MySQL, MariaDB, ClearDB, SQLite

Frameworks: React, Flask, Django

Developer Tools: AWS, Linux, Git, Apache, Nginx, Node.JS, Heroku, VS Code, Visual Studio

Stacks: LAMP

# Research

#### Machine Learning, Natural Language Processing

September 2022 - Present

St. Louis, MO

Washington University in St. Louis, McKelvey School of Engineering

- Master's student research assistant
- Advised by Professor Chenguang Wang

#### Research Site

ReactJS

• See more of my research at https://lienlearns.tech