# Lien Zhu

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# EDUCATION

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

Master of Engineering in Computer Science and Engineering, 4.0

St. Louis, MO January 2022 - May 2023

St. Louis, MO

Aug. 2018 - May 2022

# Washington University in St. Louis

Bachelor of the Arts in Biology, 3.96

#### Projects

#### Message in a Flask | messageinaflask.com

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
- Python, Flask, PostgreSQL, Jinja

# Calendar | cleancalendar.herokuapp.com

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
- Linux, Apache, MySQL, PHP, JavaScript, AJAX

### Personal Website | https://lienzhu.dev

• HTML, CSS, JavaScript

#### Experience

#### Teaching Assistant, Data Structures and Algorithms CSE 247

August 2022 – Present

Washington University in St. Louis, McKelvey School of Engineering

St. Louis, MO

- Responsible for holding office hours 4+ 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, Object Oriented Software Dev. Lab CSE 332S

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, file structure
- Responsible for holding office hours 2+ hours per week with 20+ students per session

#### Technical Skills

Languages: PHP, C++, C, Python, SQL, JavaScript, Bash, HTML/CSS, Java, Atmel AVR Assembly, R

Databases: PostgreSQL, MySQL, MariaDB, ClearDB, SQLite, ORM Techniques

Frameworks: React, Flask, Django, JUnit

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

Cloud Services: Amazon Web Services, Heroku

# Research

# Machine Learning, Natural Language Processing

September 2022 – Present

Washington University in St. Louis, McKelvey School of Engineering

St. Louis, MO

- Master's research advised by Professor Chenguang Wang
- Deep language model for biomedical structure prediction

# Personal Research Site | https://lienlearns.tech

ReactJS