# 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

Bachelor of the Arts in Biology, 3.96

Aug. 2018 - May 2022

#### Projects

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

Washington University in St. Louis

August 2022

- Designed and developed full-stack web app that implements message in a bottle concept
- Users can write messages, save messages that float onto their page, throw messages back into ocean
- Developed through iterative, Agile minded methodology
- Implemented with Flask following MVC architecture pattern
- Leveraged environment variables to deploy production quality app to Heroku
- 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
- Learned web app security principles: session management, user authentication, CSRF tokens, prepped SQL queries
- Leveraged environment variables to deploy production quality app to Heroku
- 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
- Develop analogies and visual aids to make challenging concepts more accessible for students

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

August 2022 – Present

Washington University in St. Louis, McKelvey School of Engineering

St. Louis, MO

- Streamline lecture and studio learning by facilitating small group problem solving 3+ hours per week
- Teach C++ language features, memory management, environment set up, compilers
- 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, AVR Assembly, R

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

Frameworks: React.js, Flask, Django, JUnit Testing

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

Cloud Services: Amazon Web Services, Heroku

#### Research

### Machine Learning, Natural Language Processing for Biomedicine

September 2022 – Present

Washington University in St. Louis, McKelvey School of Engineering

St. Louis, MO

• Master's research advised by Professor Chenguang Wang

• Docker, MetaAI OPT

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

React.js