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

January 2022 - May 2023

Washington University in St. Louis

Bachelor of the Arts in Biology, 3.96

St. Louis, MO

Aug. 2018 - May 2022

Projects

Message in a Flask | messageinaflask.com

August 2022

St. Louis, MO

- Designed and developed full-stack web app that implements message in a bottle concept
- Users can write messages, save messages that float into their page, throw messages back into ocean
- Developed through iterative, Agile minded methodology
- 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 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, debugging student errors
- Teach 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, 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

Cloud Services: Amazon Web Services, Heroku

Research

Machine Learning, Natural Language Processing

Washington University in St. Louis, McKelvey School of Engineering

St. Louis, MO

September 2022 – Present

• Master's research advised by Professor Chenguang Wang

• Deep language model for biomedical structure prediction

Personal Research Site | https://lienlearns.tech

React.js