

Jacob Lang

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EDUCATION

University of Michigan, Ann Arbor, MI

Aug 2020 – Apr 2024

Bachelor of Science in Computer Science and Cognitive Science

GPA: 3.64

Coursework: Data Structures and Algorithms, Operating Systems, Computer Organization, Computer Security, Computational Linguistics, Compiler Construction, Artificial Intelligence

EXPERIENCE

Southwestern Oregon Workforce Investment Board, Coos Bay, OR (Remote)

Platform Development Coordinator

May 2023 – Feb 2024

- Spearheaded the setup and optimization of the Salesforce platform to centralize employer and contact records, enabling streamlined data management.
- Successfully integrated Adobe Sign with Salesforce, allowing for the direct issuance of business contracts from the platform, improving efficiency and reducing manual processes.
- Conducted user training sessions to ensure staff proficiency with Salesforce and Adobe Sign, resulting in increased productivity.

LSA Technology Services, University of Michigan, Ann Arbor, MI

Data Entry Specialist

March 2022 – May 2023

- Maintained and optimized detailed records of over 16,000 university-owned technology assets.
- Developed and implemented new data entry procedures and standards, improving organization of data.
- Managed the preparation of devices for deployment, ensuring they were in optimal condition and verifying their inclusion within the inventory system.
- Conducted thorough inventory checks of retired assets, maintaining accurate records and facilitating efficient asset disposal processes.

PROJECT EXPERIENCE

Compiler Construction, University of Michigan

C-Like Compiler – OCaml

Jan-May 2024

- Developed an x86 assembler, linker, loader, and simulator; compiled LLVM IR to x86; built a subset of C to LLVM compiler; and implemented optimization techniques for efficient code generation.

Operating Systems, University of Michigan

Multithreaded Network File Server – C++

December 2023

- Programmed a robust multithreaded network file server in C++, facilitating secure and efficient client-server interactions through a hierarchical file system.
- Implemented socket programming and fine-grained thread locking mechanisms to manage concurrent file operations and network messages, ensuring high concurrency and data integrity.

SKILLS

Computer Languages & Tools: C/C++, Python, Java, R, OCaml, JavaScript, Assembly, SQL, Windows, MacOS, Excel, Wireshark, Git, Salesforce, TeamDynamix

Frameworks & Environments: Visual Studio Code, XCode, Google Colab, Docker, NumPy, RStudio

LEADERSHIP & ACTIVITIES

Board Representative, Inter-Cooperative Council of Ann Arbor

Aug 2022 – May 2023

President, Scandinavian Club

Aug 2022 – May 2023

Fundraising Chair, Michigan Snowboard Club

Aug 2023 – May 2024