Luke Irwin

Omaha, NE | (531) 777-0947 | lukemirwin@gmail.com | linkedin.com/in/lukemirwin

EDUCATION

UNIVERSITY OF NEBRASKA OMAHA   *Omaha, NE*
Bachelor of Science in Computer Science, Honors Student   *Exp. May 2025*
Concentration in Software Engineering
GPA: 3.906

EXPERIENCE

SHYFT SOLUTIONS   *Omaha, NE*
Software Engineering Intern   *May 2024 – Present*
- Created automated templating and validation scripts for XML files, reducing hundreds of configurations to a manageable few dozen, enabling faster and more efficient future development for our products across over 1,000 maps.
- Presented my work to internal teams and government stakeholders, integrating feedback given to make improvements and modifications based on projected goals.
- Developed scripts for visual validation of maps by parsing the internal catalogue and retrieving all maps using HTTP requests, streamlining the process of reviewing maps after each build.

BIOINFORMATICS RESEARCH LAB   *Omaha, NE*
Student Web Developer   *Apr 2023 – May 2024*
- Designed, developed, and maintained the website for the bioinformatics E-PACERR program at UNO, a program dedicated to developing and teaching a standard for bioinformatics research.
- Intentionally designed the website for Section 508 compliance to ensure universal design and user accessibility.
- Received a FUSE (Fund for Undergraduate Scholarly Experience) grant to develop a statistical analysis report on the survey results gathered from the E-PACERR program.

FISERV   *Omaha, NE*
Artificial Intelligence and Applications Development Intern   *Jun 2023 – Aug 2023*
- Engineered an end-to-end article writing program for the marketing team using the LangChain framework and OpenAI's GPT-3.5-Turbo model, including planning, drafting, and editing functionalities.
- Worked with internal databases making SQL queries to get company metrics for reports.
- Contributed to the enhancement of troubleshooting documentation pertaining to Oracle issues, both through updating and authoring documents.

PUBLIC HEALTH INFORMATICS RESEARCH LAB   *Omaha, NE*
Student Web Developer   *Aug 2022 – Apr 2023*
- Designed and implemented the front-end UI for an Administrative management page for an IoT application using Angular.
- Developed graphics to display mission critical information for a health monitoring application primarily targeted towards firefighters.
- Collaborated with the team to update all major pages of the application, enhancing its functionality and UX.
- Conducted research and established logic for best practices when displaying health data.

NEBRASKA TECH COLLABORATIVE (NTC)   *Omaha, NE*
Intern   *June 2022 – Aug 2022*
- Researched and connected with tech companies across Nebraska, identifying potential partners and expanding the NTC's network.
- Created a web-scraping tool to monitor media mentions of NTC partners, boosting publicity efforts.
- Assisted in organizing and hosting networking events, serving as an ambassador for the organization.

Luke Irwin

Omaha, NE | (531) 777-0947 | lukemirwin@gmail.com | linkedin.com/in/lukemirwin

NOTABLE PROJECTS

THE GALLERY (JAVASCRIPT)

Independent   *Active*

- Tools/Technologies Used: Game Programming, Game Design
- Main Achievement: Designed a game with all original assets, implemented it into a static website without using a framework, and effectively displayed my portfolio in a creative way.
- Impact: Shows off my programming talents while showcasing some of my projects in an interactive and engaging format.
- Repository: https://github.com/lukeirwin03/e-pacerr-website
- Link: https://lukemirwin-portfolio.vercel.app/

ARTICLE GENERATION (PYTHON)

Fiserv   *Aug 2023*

- Tools/Technologies Used: Python, LangChain, OpenAI API, Prompt-Engineering
- Main Achievement: Produces full-length articles from a single input of a topic by chaining LLM calls to iterate through the steps of writing an article(outlining, drafting, and editing). Additionally, the program writes the article to a markdown file for seamless article hosting.
- Impact: Reduces the amount of time and people needed to write high-quality articles and increases the responsiveness of Fiserv's marketing team to new and notable trends.
- Repository: N/A - Proprietary

FROG GAME WITH NEURAL NETWORK (PYTHON)

Honors Colloquia: Computers and Complexity   *May 2023*

- Tools/Technologies Used: Python, PyGame, SciPy, NumPy, OOP
- Main Achievement: Developed a replica of the Google Chrome "Dino" game and applied a neural network and evolution algorithm to demonstrate machine learning.
- Impact: Serves as a demonstration of principles of evolution and machine learning.
- Repository: https://github.com/lukeirwin03/Dino-NeuralNet

ADDITIONAL

Programming Languages: Python, C, Javascript/Typescript, Java, HTML, CSS, and SQL.
Technical Skills: Git, Angular, React, Docker, Figma, Prompt Engineering, Databases, Code Documentation, Data Structures, and Algorithms.
Certifications & Training: LinkedIn Python and HTML badges; DeepLearning.AI Prompt Engineering for Developers, Building Systems with the ChatGPT API, and LangChain for LLM Application Development courses.
Awards: FUSE (Fund for Undergraduate Scholarly Experience) Grant 2024; Dean's List Multiple Semesters (Fall 2021 - Spr 2024); Chancellor's List (Fall 2022, Fall 2023)