David Ludington

517-599-2189 | diludington@gmail.com | https://davidludington.com/ | https://github.com/davidludington

EDUCATION

Loyola University Chicago   Chicago, IL
Bachelor of Science in Computer Science, Magna Cum Laude   *August 2021 – May 2025*

TECHNICAL SKILLS

Languages: Python, Java, C/C++, SQL (Postgres), JavaScript, HTML/CSS, R, Scala
Frameworks/Libraries: Junit, Django, SQLAlchemy, pandas, NumPy, Matplotlib, psycopg2, pymongo, React
Developer Tools: Git, Docker, Google Cloud Platform, Visual Studio, Vim, IntelliJ, Pycharm
Testing: pytest, unittest, Selenium, Appium

EXPERIENCE

QA Automation Engineer | *Encyclopedia Britannica*   June 2024 – Present
- Collaborate with QA and Development teams to update/create test automation scripts using Selenium and Appium in Python
- Migrated testing frameworks from unittest to pytest, improving test readability, maintainability, and execution speed by 50%.
- Developed and maintained automated test scripts for mobile platforms, ensuring cross-platform compatibility.
- Conducted testing across QA, Staging, and Production environments, identifying defects before release.
- Improved CI/CD processes by integrating automated test pipelines with GitHub Actions, enhancing reliability
- Utilized Jira for defect tracking and reporting, ensuring seamless collaboration between teams.

Writing Center Tutor | *Loyola University Chicago*   August 2022 – May 2025
- Provided personalized feedback to over 200 students, resulting in a 95% satisfaction rate in post-appointment surveys.
- Conducted workshops on academic writing strategies, improving student outcomes across various disciplines.

Fitness Supervisor Lead | *Loyola University Chicago*   February 2023 – May 2025
- Managed a team of 50 fitness supervisors, optimizing communication channels and operational workflows.
- Created a comprehensive scheduling framework that balanced staff availability with facility demands, reducing scheduling conflicts by 40%.
- Ensured compliance with safety protocols, contributing to a safe environment.

RESEARCH

Test Effectiveness | *Python, Git*   February 2024 – June 2024
- Extracted and analyzed software metrics to assess test coverage and effectiveness.
- Authored technical documentation summarizing findings, contributing to improved testing practices and better software quality.

Doyle Living Systems Laboratory | *Docker*   May 2021 – May 2022
- Designed and maintained virtual environments using Docker, streamlining workflows for the laboratory team.
- Developed expertise in interpreting technical documentation and managing container systems.

PROJECTS

Mock Schedule builder for Halas | *Python, Pandas*   June 2023 – May 2024
- Automated scheduling for a team of 50 employees by creating a tool that aligns employee availability with facility operating hours.
- Enhanced scheduling efficiency by 40%, reducing manual input errors and freeing up time for other critical tasks.

Snake Game | *C++, Raylib*   February 2024
- Designed and implemented a fully functional Snake game using C++ and Raylib, exploring advanced graphics capabilities.

Image to ASCII art | *Python, tkinter*   March 2024
- Developed a Python script to convert JPEG images into ASCII art.

Portfolio Website | *HTML, CSS, JavaScript*   December 2023 – Present
- Built a responsive website from scratch to showcase academic and personal projects, honing front-end development skills.