

Joseph Ampfer

ampferj2@nku.edu | linkedin.com/in/joseph-ampfer | github.com/joseph-ampfer

EDUCATION

Northern Kentucky University

Aug. 2024 – May 2026

Bachelor of Science in Applied Software Engineering & Cellular Biology, Minor in Chemistry Highland Heights, KY

EXPERIENCE

Developer & Designer — NIH-Funded AI/LLM Application

Present

Northern Kentucky University

Highland Heights, KY

- Collaboratively led the development and design of the mobile interface for an AI-driven application
- Contributed in team decisions on web design, AI development, and data strategies to ensure alignment with project goals
- Advocated for ethical and privacy standards within the team, reinforcing user trust and compliance with NIH guidelines
- Selected for the Launch Blue tech accelerator program, which recognizes innovation and potential impact in the tech industry

Founder, AI in Medicine Interest Group

Aug. 2023 – Aug. 2024

University of Kentucky College of Medicine

Highland Heights, KY

- Initiated and lead a professional group aimed at exploring the integration of artificial intelligence in medical practices and research
- Organized events for medical professionals to discuss and explore the implications of AI in healthcare

Laboratory Technologist

April 2021 – Feb. 2022

Cincinnati Children's Hospital

Cincinnati, OH

- Conducted complex laboratory tests and analyses using advanced equipment and techniques
- Demonstrated excellent attention to detail and ability to accurately record and report results
- Assessed and troubleshoot technical issues with computers and instruments

Molecular Biology Research Assistant

Aug. 2020 – June. 2021

Northern Kentucky University

Highland Heights, KY

- Co-authored a study published in the peer-reviewed journal G3
- Led experiments on gene behavior in yeast, contributing to the understanding of pharmacogenomics and drug efficacy

PROJECTS

UV Sense | *ESP32, BLE, React Native, MySQL, PHP, C++*

Aug. 2024 – Present

- Developed a full-stack UV sensor monitoring application to provide real-time UV exposure data from a wearable device, enhancing user awareness of UV safety and skin health
- Collaborated with a teammate on development using GitHub for version control and code reviews
- Developed a custom UV sensor device using ESP32 and BLE for low-power data transmission
- Optimized BLE communication in C++ for improved sensor accuracy and battery efficiency
- Built interactive UV exposure data visualization tools in React Native

Touch Grass Royale | *Google Cloud Platform, FastAPI, React Native, PostgreSQL, Docker, Firebase*

Jan. 2024 – Present

- Developed a full-stack mobile application using React Native to promote lower screen time via gamification and competition among friends
- Deployed a robust and scalable backend using FastAPI running on Cloud Run, Cloud SQL, and Firebase storage
- Led closed testing on Google Play Store, garnering positive feedback from users
- Actively published over-the-air updates to keep the app engaging and fix bugs

AMPFER Fincance | *Python, Flask, React Native, SQLite*

Nov. 2023 – Jan. 2024

- Developed a full-stack mobile application using Flask serving a REST API with React Native as the frontend
- Designed with real-time stock data, virtual currency, and portfolio tracking capabilities
- Implemented user authentication with Flask and JSON Web Tokens

Portfolio Website | *HTML, CSS, Bootstrap, Javascript, Github Pages*

Nov. 2023 – Dec. 2023

- Developed a responsive website using HTML, CSS, Bootstrap, and JavaScript; emphasized minimalist design and interactive user experience
- Implemented dynamic content features and responsive design elements

TECHNICAL SKILLS

Languages: Python, C/C++, JavaScript, SQL (Postgres, MySQL, SQLite), HTML/CSS, Java, PHP

Frameworks: React Native, FastAPI, Flask, Expo, Bootstrap, TailwindCSS

Developer Tools: Git, Docker, Google Cloud Platform, VS Code, Arduino IDE

Libraries: SQLAlchemy (asyncio), React Query, Starlette, React Native Navigation, JWT, Pydantic