

Luke Moenning

moenningluke@gmail.com | 319-440-7133 | lukemoenning.com | linkedin.com/in/lukemoenning | github.com/lukemoenning

EDUCATION

The University of Iowa

Anticipated May 2025

Bachelor of Science Computer Science, Bachelor of Science Mathematics - GPA 3.69

Iowa City, IA

- Artificial Intelligence, Modeling, and Simulation Certificate + Psychology Minor
- Awards: Dean's List; Flagship Scholar (full-ride); Jason and Leslie Emerging Technologies Scholar; Edward B. Buchanan, Jr. and Mary Louise Buchanan Scholar; Honors Experiential Learning Grant

EXPERIENCE

Sage Bionetworks | *Java, SQL, AWS*

January 2024 - Present

Software Engineer Intern

Seattle, WA

- Spearheaded a UI redesign by implementing RESTful API services in a Java Spring application to provide data validation for **100k+** monthly users
- Enhanced user experience and optimized MySQL writes by refactoring custom parsing of SQL statements

HawCHI Lab | *JavaScript, Node.js, Python, AWS, DynamoDB*

January 2023 – December 2023

Undergraduate Researcher

Iowa City, IA

- Improved executive skills in **16** preschool and special education classrooms by developing a full-stack tool allowing educators to track and reflect on classroom progress
- Ensured project maintainability by converting **2** complex Qualtrics surveys to be natively integrated using JavaScript
- Efficiently handled classroom data by building supporting back-end APIs with Node.js, Python, AWS Lambda, API Gateway, and DynamoDB

W.R. Berkley Corporation | *Next.js, GraphQL, TypeScript, Kubernetes*

May 2023 - August 2023

Software Engineer Intern

Urbandale, IA

- Increased an agile team's velocity by **20%** by efficiently handling tickets and meeting sprint deadlines while developing a micro front-end, internal portal
- Optimized GraphQL services and resolvers to enhance client-side data representation and error handling
- Accelerated development time for **70+** engineers by refactoring **50+** test files, expediting the CI/CD pipeline for multiple applications

LEADERSHIP EXPERIENCE

Association for Computing Machinery (ACM)

December 2023 – Present

Secretary and Treasurer

Iowa City, IA

- Organized, ran, and handled **\$15,000** finances for weekly club meetings containing **30+ members**
- Co-orchestrated UICC, ACM's annual computing conference with **100-200** attendees

Mathnasium - The Math Learning Center

June 2019 – December 2022

Lead Instructor

Iowa City, IA

- Led a team of **10+** instructors to successfully help students recover from learning setbacks caused by COVID-19
- Provided individualized instruction to **100+** students, ranging from kindergarten to Calculus

PROJECTS

SolarViz | *Python, Streamlit, Docker*

September 2023

- Produced valuable insight into energy optimizations for Iowa City solar panel arrays by building a data analysis and visualization platform using Python that identified **3** faulty points in the arrays
- Streamlined development and deployment across a team of 4 by containerizing the project utilizing Docker

EduQuest | *React.js, GraphQL, AWS, DynamoDB, OpenAI API*

July 2023

- Won **2nd** place in the Education Challenge at the YouthCodeX 2023 Hackathon by creating a full-stack, online learning platform for children utilizing AI for problem generation and student tutoring
- Implemented GraphQL APIs to handle CRUD operations on user and problem data stored in DynamoDB, allowing for efficient and secure data manipulation

SKILLS

- **Languages:** Java, Python, JavaScript
- **Libraries and Frameworks:** React.js, TypeScript, Next.js, Node.js, Spring, Jest, JUnit
- **Tools:** GraphQL, Amazon Web Services (AWS), SQL, MySQL, DynamoDB, Docker, Kubernetes, Git, Jenkins, Maven, Vercel, Linux