

Emma Luukkonen

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EDUCATION

University of Michigan, Ann Arbor, MI

Expected Graduation: May 2022

- **Major:** Computer Science, B.S.
- **Minor:** Physics
- **Relevant Coursework:** Data Structures and Algorithms, Artificial Intelligence, Operating Systems, Computer Architecture, Software Engineering, Computer Science Pragmatics, Discrete Mathematics

INTERNSHIP EXPERIENCE

Software Engineering Intern

Reddit

June – August 2021

- Increased scalability and efficiency of real-time ad auction monitoring by designing and implementing a new Apache Flink monitoring application as part of the Ad Server team
 - This app optimized real-time monitoring by ingesting data from Apache Kafka data streams, parsing data using Flink stream-processing, and propagating data to a comprehensive Wavefront dashboard
- Redesigned and expanded ad marketplace monitoring by scoping out and implementing new metrics to better detect outages and simplify incident root cause analysis
- Gained experience with Ads, Scala, Apache Flink, Apache Spark, Apache Kafka, IntelliJ IDE, Spinnaker, Kubernetes, Wavefront Query Language

Software Engineering Intern

Ally Financial

June – August 2020

- Automated capacity and storage reporting data flow using REST APIs and python scripts to process big data
- Developed a dashboard in Power BI for storage, memory, CPUs, and RAM data using Data Analysis Expressions
- Led frequent communication with key stakeholders and team members to spearhead the capacity project based on team needs
- Gained experience with Python, Power BI, REST APIs, Postman, VMware, ServiceNow, BigPanda, VS Code

Software Development Intern

ProModel

May – August 2019

- Optimized new web-app testing by implementing an automated testing suite using Selenium
- Improved two customer-facing web applications by updating information, organizing pages, fixing front-end bugs, and creating robust documentation
- Implemented backend web-application unit tests in C#
- Collaborated with a team of full-time developers and other interns to create, test, and deploy two web-applications
- Gained experience with C#, front-end web development, automated testing, JIRA, Selenium WebDriver, Git

SOFTWARE PROJECTS

Personal Website: <http://www.emmaluukkonen.com/>

GitHub: <https://github.com/luukkoe>

Mancala: Artificially Intelligent Gameplay

- Implemented a single and multi-player Mancala command-line game, utilizing artificial intelligence algorithms

ACTIVITIES

Facebook Above and Beyond Computer Science (ABCS 2020) Participant

- Participated in weekly collaborative programming workshops designed to enhance data structures and algorithms understanding
- Completed programming challenges and engaged with Facebook software engineers and industry professionals

Michigan Hackers Android Development Team Member

- Collaborated with a team of students in weekly pair programming sessions to begin implementation for an Android food-rating app

SKILLS

proficient: C++, C, Scala, Python, Apache Flink, HTML/CSS, Git

familiar: C#, Java, REST APIs, Apache Spark, Apache Kafka, Selenium, R, Matlab