

KAYLIE SAMPSON

Ashland, NH · (978) 987-2598 · kksamps2@gmail.com

<https://github.com/kaylie-e-sampson> · www.linkedin.com/in/kaylie-e-sampson · <https://kaylie.dev>

EDUCATION

Dartmouth College, Hanover, NH

June 2025

Bachelor's Degree, Major in Computer Science and Minor in Digital Arts

GPA 3.8/4.0

Activities: CoderDojo, DALI Lab, First-Generation Community, HackDartmouth, NCWIT Student Ambassador, Rewriting the Code (RTC) Student Leader, TuckLAB: Entrepreneurship, Women in Computer Science (President)

RELEVANT EXPERIENCE

Duolingo, Pittsburgh, PA

June 2024 – Present

Software Engineer Intern

- Enhancing user retention by 81% on the language learning platform through refining existing features and implementing new ones via A/B testing, significantly supporting the Retention Team's initiatives
- Developing a session-end screen that tracks and displays a user's progress towards their next streak reward using **React.js**, leading to an increase of 3.7k Daily Active Users (DAUs) on the platform, enhancing user engagement

Amazon Web Services, Seattle, WA

June 2023 – September 2023

Software Development Engineer Intern

- Spearheaded the design and development of a robust **PostgreSQL** protocol state machine in **Rust** that tracks and monitors the state of protocol communication between diverse clients and **Aurora** Database instances
- Pioneered the integration of additional custom logic within the protocol state machine, empowering AWS **Relational Databases** with unique monitoring features and custom behaviors that allow for advanced debugging

Digital Applied Learning and Innovation (DALI) Lab, Hanover, NH

January 2022 – June 2024

Software Engineer

- Collaborated with a team of designers and developers to create mobile, web and AR/VR applications, leveraging expertise in **React.js**, **React Native**, and **C++** to deliver effective solutions to complex problems
- Mentored 40 developers in a fast-paced, collaborative environment by guiding discussions, providing constructive feedback, and sharing expertise in best practices to ensure project success and growth

Pegasystems, Salem, NH

June 2022 – September 2022

Software Engineer Intern

- Developed critical microservices components and various internal testing infrastructure in **Kotlin** while implementing rigorous test suites using **Docker** and **Jenkins** for the low-code Pega Platform
- Collaborated with a team of 5 software engineers to deliver software solutions through the full agile process

PROJECTS

HackDartmouth

June 2022 – June 2024

- Launched the annual hackathon website using **Webflow** to facilitate seamless registration for 100+ participants and facilitated in-person workshops on web programming fundamentals in **React.js** and **React Native**

MeU

March 2023 – June 2023

- Spearheaded the development of a check-in feature using **React Native** by implementing 3 components, enabling users to create, edit, and delete responses to daily relationship questions about their partner

mGame

September 2022 – March 2023

- Developed 8 responsive **React** components to construct an engaging and interactive survey for patients at Dartmouth Hitchcock Medical Center, empowering them to establish goals for their medical treatment

Rüm

January 2022 – June 2022

- Implemented the functionality for a calendar screen using **React Native** and **MongoDB** that enhanced the user experience in a mobile application that manages communication between college roommates

Testnode

September 2020 – October 2020

- Designed and developed an **iOS** application in **Swift** that streamlines the process of checking into Covid-19 testing centers by providing a mobile platform to create and submit necessary patient forms

SKILLS & INTERESTS

Proficient: C, HTML/CSS/JavaScript, Java, Kotlin, PostgreSQL, Python, React Native, React.js, Rust, SQL, Unity

Familiar: C++, Docker, Firebase, Jenkins, Kotlin, MongoDB, Relational Databases, Swift, Visual Basic, Webflow

Interests: Cross-Country Skiing, Hiking, Powerlifting, Reading, Scrapbooking, Solo Traveling, Waterskiing