

BIRAT KOIRALA

Software Engineer || Computer Science || Full Stack

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in birat-koirala

biratkk

London, UK

EXPERIENCE

Software Engineering Intern

Amazon

July 2023 - September 2023

Dublin, Ireland

- Designed and built a proof of concept prototype UI design tool in React that improved developer workflow by 70% for a large-scale internal code generation engine. Integrated full-stack technologies to enable enhanced functionality.
- Bootstrapped and hosted scalable infrastructure on AWS services like Route 53, Lambda, API Gateway and S3 using aws-cdk. Established foundations for wider team adoption and growth.
- Implemented CI/CD pipeline to enable streamlined development through automated build, test and deployment processes.
- Led initial proof of concept phases and ensured smooth transition to internal team for full production development based on successful prototype.

Software Engineering Intern

FundApps

July 2022 - September 2022

London, UK

- Improved the rendering time of graph data loading and rendering by 150%
- Migrated a dynamic graph and chat box from monolithic .NET component to standalone React service, allowing the user to dynamically interact with and make changes to current and past asset disclosure information in real-time.
- Utilised and appended to strict client side testing, automated integration and visual regression testing to ensure security and robustness using TDD practices.

PROJECTS

Studypal - Full stack flashcard application that uses input (text, pdf, pptx and docx) and generates them into flashcards using OpenAI API. Deployed on AWS. Built with React and FastAPI.

Audioshelf - Fullstack self hosted audio streaming platform to better understand how podcast applications worked. Built with React and Supabase.

Connect4 ML - Full stack connect4 application using ReactJS and ExpressJS. Implemented bot that uses ML to play connect4 with variable difficulty.

Comment Analyser - API that utilises Natural Language Processing to analyse the positivity of the comments of a specific YouTube Video.

Sudoku Solver - Backtracking visualiser to solve sudoku puzzles. Built with Java.

EDUCATION

B.Eng. Computer Science

University of Leeds

2021 - 2024

International Baccalaureate

Dartford Grammar School

2019 - 2021

Achieved 42/45 points

TECHNICAL SKILLS

React

Typescript

HTML/CSS

SQL

Java

Python

C/C++



NextJS React Native ExpressJS

REST API GraphQL Tailwind

flask FastAPI numpy SQLite

MongoDB NoSQL Git Docker

Maven Heroku Agile AWS

Node Linux Figma UX Design

Object Oriented Design

LANGUAGES

English

Nepali

Hindi

