# Rabin K Kalikote







## **Education**

The College of Idaho Caldwell, ID

BA COMPUTER SCIENCE AND MATHEMATICS · Theatre and Psychology Minors

Aug, 2022 - Jan, 2026

• Dean's Honours List: CGPA 3.8/4.0

• Leadership: President of Coding Club, Facilitator of 'Coding Nights', Instructor of 'Build-Your-Brand 101'

### **Technical Skills**

Programming Python (advanced proficiency) · JavaScript · C++ · Ruby

Web/Media HTML/CSS · jQuery · Bootstrap · Ruby on Rails · Flask · Express · Git · Photoshop

Databases SQL PostgreSQL R

# **Projects**

Ask Mattrab: Online Learning Platform | Ruby on Rails, PostgreSQL, HTML, CSS, jQuery, AWS

- Engineered, developed, and deployed a full stack responsive social learning app, attracting 10,000 registered students within the first year and achieving 60,000 monthly visits.
- Designed and maintained a relational database with ActiveRecord, comprising 19 tables and over 46,000 rows to organize complex relationships between users, content, and interactions.
- · Designed over 40 responsive web pages to enhance user experience and content organization across various sections of the app, contributing to an 18% increase in average user engagement.

#### AgriNews: News Aggregation Platform | Python, Flask, Flutter, Heroku

- · Led backend team to build web scraping algorithm using Beautiful Soup (bs4) and APScheduler python library that scraped news from 9 Nepalese news websites and updated the database every 15 minutes.
- · Built a news filter algorithm with natural language processing (NLP) that filtered agriculture related news with 95% accuracy; hosted the filtered news in python Flask app.

#### pCards: Business Data Visualizer | Python, Matplotlib, Visual Basic

- · Led transition to modern Python algorithm, optimizing data processing speed by implementing Merge Sort, improving efficiency by 40% compared to the original Bubble Sort in Visual Basic.
- · Enhanced data visualization, utilizing Matplotlib to create detailed and aesthetically improved graphs, significantly improving the clarity and presentation of the college's spending data by category.

# **Internships / Works**

#### **Software Development Intern**

Denver, CO

WSP USA INC.

June, 2023 - Aug, 2023

- Developed a prototype Web App using Express, React and Autodesk Forge API, enabling users to upload, view, and interact with 3D models directly in the web browser, resulting in a 8% faster rendering.
- · Integrated Microsoft MSAL authentication and implemented data export functionality, enhancing security and user interaction, and deployed the application in a test environment.

#### **Computer Science Tutor**

Caldwell. ID

THE COLLEGE OF IDAHO

March, 2023 - Present

- · Guided students through advanced Python topics including OOP, data structures (dictionaries, stacks, queues, linked lists, binary trees), and algorithm analysis (sorting and searching with time complexities).
- Utilized demonstration, visualization, targeted questioning, and examples walk-through strategies to ensure comprehensive understanding, resulting in 100% tutees achieving A grades.