Kunal Dutta

San Francisco, CA • 408-637-1875 • kdutta@berkeley.edu
linkedin.com/in/kdutta9 • github.com/kdutta9 • kdutta.com

PROFESSIONAL EXPERIENCE

SoFi | San Francisco, CA
Software Development Engineer (Bank) July 2022 - Present

- Developed logic for peer-to-peer and wire transfers using the SoFi banking service.
- Implemented local and staging testing processes for features using Temporal, Kraken, Mockito.
- Tools Used: Java, Temporal, Kraken, GitLab, Beehive

SoFi | San Francisco, CA
Software Engineer Intern (Big Data Infrastructure) June 2021 - August 2021

- Integrated Terraform into existing workflow to securely provision cloud resources and databases to increase flexibility and speed.
- Implemented testing and planning stages for Terraform scripts by writing a GitLab CI/CD pipeline.
- Tools Used: Terraform, Snowflake, Amazon Web Services (CloudFormation, S3, Secrets Manager), GitLab

University of California, Berkeley|Berkeley, CA
Course Tutor September 2020 - December 2020

- Taught undergraduate students introductory programming skills using Python, SQL, C, and Assembly code.
- Moderated tutorial sections and office hours to assist undergraduate students with concepts in a smaller group setting.
- Courses Taught: The Structure and Interpretation of Computer Programs, Computer Architecture, Foundations of Data Science

iD Tech Camps|Campbell, CA
Computer Science and Math Instructor June 2020 - October 2020

- Taught 1-on-1 and group private lessons about programming, mathematics, and other technology fields to students ages 9-19.
- Developed curriculum/lesson plans for object-oriented programming, machine learning, and mathematics coursework.
- Courses Taught: Python, Java, Machine Learning, Artificial Intelligence, Cyber-Security, Calculus

PROJECTS

Smart Surveillance System|Engineering Project
https://github.com/kdutta9/Smart-Surveillance

- Implemented real-time motion detection system that alerts a user with Twilio API and sends the footage via cloud storage (AWS S3).
- Built hardware systems with Raspberry Pi and cameras, which deployed to an 18-house neighborhood.
- Tools Used: Python, OpenCV, Twilio API, Amazon Web Services, Raspberry Pi

Basketball Shot Tracker Application|Programming Project
https://github.com/kdutta9/ShotTracker

- Created an Android application that can detect basketballs and hoops, and count shots missed and made.
- Trained custom TensorFlow Lite model using YOLOv4 real-time object detection and cloud computing (Google Cloud).
- Tools Used: Python, Java, TensorFlow Object Detection API, YOLOv4, Google Cloud Platform

Daily Basketball Fantasy Projections|Club Programming Project
https://sportsanalytics.berkeley.edu/fantasyprojections

- Designed and built web pages that display projection data for fantasy basketball, updating daily via cron job.
- Implemented filters to search via player name, position, and team, using JavaScript functions on a result table.
- Tools Used: Python, Pandas, HTML, CSS, JavaScript, Shell

SKILLS

Languages: Python (OpenCV, TensorFlow, Numpy, Pandas), Java, C, HTML/CSS, Shell
Technologies: Amazon Web Services (CloudFormation, S3, DynamoDB), Terraform, Snowflake, Beehive, Temporal, Gitlab CI/CD, Linux

EDUCATION

University of California, Berkeley May 2022
Bachelor's of Arts, Computer Science
Relevant Coursework: Algorithms; Data Structures; Operating Systems; Artificial Intelligence; Databases; Optimization; Robotics
Activities and Societies: Delta Kappa Epsilon, Cal Mic Men, Sports Analytics Group at Berkeley