Pranab Singh

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EDUCATION

MEGHNAD SAHA INSTITUTE OF TECHNOLOGY
Bachelor in Computer Application
June 2020 | Kolkata, India
Cum. GPA: 8.2 / 10

CALCUTTA PUBLIC SCHOOL
High School
Grad. May 2016| Kolkata, India
Percentage: 83.25 / 100

LINKS

Github:// **pranabs1ngh**
LinkedIn:// **pranabs1ngh**
Twitter:// **@pranabs1ngh**

COURSEWORK

UNDERGRADUATE
Design and Analysis of Algorithms
Data Structures with C
Database Management Systems
Computer Architecture
Operating Systems
Computer Networks
Unix and Shell Scripting

RELEVANT COURSES
Udemy
Modern React with Redux • Node.js : Building RESTful APIs • Advanced React and Redux • Node.js : Advanced Concepts • Django Core : Guide to Core Django Concepts • Junior to Senior Web Developer Course • The Complete React Native + Hooks Course • Docker & Kubernetes : The Complete Guide

SKILLS

PROGRAMMING
General:
Database • Algorithms • Server Side Programming
Languages:
C • C++ • Python • HTML • CSS JavaScript • LaTeX
Tools / Framework:
NodeJs • django • ReactJs • Redux Docker • Kubernetes • React Native MySQL • MongoDB

EXPERIENCE

UPWORK | Full Stack JavaScript / Python Developer (Remote)
Feb 2019 - Present
- Developed fully test driven highly scalable systems for clients accross world
- Worked with local clients to create their online business systems from scratch

PROJECTS

FLOCK | Full Fledged Native Messaging Application
Sept 2019 - Present

- Developed all screens with React Native based on reusable components architecture
- Implemented peer to peer instant messaging using web sockets protocol
- Implemented group messaging feature
- Implemented Audio and Video Call using WebRTC
- Wrote server using micro-services architecture
- Created server and micro-services in Docker based containers
- Implemented load balancer using Kubernetes (for multiple server instances)
- Created a basic messaging queue from scratch
- Implemented MQ and Authentication service using serverless functions (AWS Lambda / Google Cloud Functions)
- Enabled end-to-end encryption using RSA encryption method

QUIVIA | Quiz Game with single/multi-player options
July 2019 – Aug 2019

- Developed all screens using React based on reusable components architecture
- Wrote Screen Update logic based on current game state
- Implemented user authentication using google/facebook OAuth or local authentication
- Used socket.io to transfer data between two players
- Wrote algorithm to maintain socket rooms and match players for a game with specific id
- Developed a simple bot to play with the user in case the server can't find an opponent to play with

SUDOKU SAGA | Native Sudoku Application
Sept 2019 – Oct 2019

- Developed all screens using React Native based on reusable components architecture
- Wrote a backtracking algorithm from scratch to generate a sudoku board
- Hid number of cells based on difficulty level selected by user
- Implemented undo / erase / pencil / hint features from scratch
- Created a fully functional native app in React Native
- Built with reusable components based on React App Architecture

NAGINI | Snake game built for pesto bootcamp
Sept 2019 – Sept 2019

- The game is playable by either the arrow keys or 'W', 'A', 'S', 'D'.
- Implemented the game logic from scratch in JavaScript
- Developed all screens using React based on reusable components architecture
- Implemented screen updates using React life-cycle methods
- Created API to store high scores and user data in NODE