SHIVAM NAYAK

@ shivamnayak25.sn@gmail.com   in shivam-nayak-647316199   ⌂ Daddycool9999

EDUCATION

B. Tech in Computer Science and Engineering
International Institute of Information Technology, Hyderabad

📅 July 2018 – Present   📍 CGPA: 7.84/10

WORK EXPERIENCE

Software Development Intern
FIVE FINGERS INNOVATIVE SOLUTIONS

📅 January 2020 – April 2020   📍 Hyderabad, India

- Designed and analysed a software system to automate the process of object identification, object extraction, and noise removal, for objects in a 3-D scene.
- Technologies: OpenCV, Tensorflow, Django, Cloudcompare.

Android Developer
Suryabala Energy Solutions (OPC) Private Limited

📅 June 2020 – July 2020   📍 Remote

- Building an android application for real time data access and updation in IOT based cloud storage for electrical consumption of appliances in residential/commercial buildings.
- Technologies: Android Studio, REST API, Thingspeak.

Software Engineering Intern
Media.net

📅 May 2021 – July 2021   📍 Remote

- Big data analytics to come up with parameters to segregate visitors (of acquired ad spaces) into different groups. Created data pipeline to automate the use of the parameters to optimise future bids.
- Technologies: Scala, Spark,Apache Hive, MySQL, Apache Oozie

RELEVANT COURSEWORK

- **Computer Science** : Data Structures and Algorithms, Introduction to Software Systems, Design and Analysis of Software Systems, Machine Data and Learning, Computer Systems Engineering-1, Algorithm Analysis and Design, Software Programming for Performance, Data and Applications, Automata Theory.
- **Mathematics** : Probability and Statistics, Linear Algebra, Discrete Structures, Real Analysis, Introduction to Information Security.
- **Miscellaneous** : Introduction to IOT, Embedded Systems Workshop.

ACHIEVEMENTS

ACM-ICPC 2020:
- **Team rank 349** in ACM ICPC Amritapuri online round. **Qualified for Amritapuri Regionals**.
- **Team rank 311** in ACM ICPC Amritapuri Regionals.

Competitive Programming Profile (Max) :
- **5 star coder** in **CodeChef**
- **Expert** in **CodeForces**

Other Scholastic Achievements :
- Secured **All India Rank 1100** in **JEE Advanced-2018** among more than 200,000 contesting candidates
- Secured **All India Rank 493** in **JEE Main-2018** among more than 1 million candidates
- Recommended, with an **All India Rank 690** ,for **KVPY** Fellowship Award-2016.

SKILLS

- **Programming and Scripting** : Data Structures and Algorithms, C, C++(STL), Python, Javascript, Java, Bash.
- **Web and Databases** : Firebase, MySQL, HTML, CSS, React, NodeJs, Express, MongoDB.
- **Miscellaneous** : Linux, x86-Assembly, Git, LaTeX.

PROJECTS

JetPack Joyride
- Created a replica of the famous game Jetpack joyride in Python without the use of external libraries. [**Python, OOPS**]

Linux Shell
- Used syscalls to create a basic bash-like Linux shell in C programming language.Key features included foreground and background processes, piping, redirection, signal handling and user defined commands. [**C, Operating Systems**]

Xv6 Process Scheduler
- Added custom process schedulers including FCFS Scheduler, Priority Based Scheduler and MLFQ Scheduler in MIT Xv6 OS. [**C, Operating Systems**]

Firebase based Application
- Created android application that implements the use of most Firebase features like authentication, realtime database, storage to provide login/signup, realtime chat messaging, image uploading. [**Android Studio, Java, Firebase**]

Sky Force Replica
- Created a 2-D space shooter replica of the game Sky-Force using the three.js library [**Javascript, HTML, Blender**]

Deadlock Detection Algorithms under various Message Delivery Channels
- Implemented Chandy Misra Haas algorithms (AND , OR Models) and Mitchell Merritt's algorithm under causal, fifo and non-fifo message delivery systems and compared the number of messages required to detect the deadlock for the different channels. [C++, **Python**]

EXTRACURRICULAR

- Member of Felicity Sports Organisation Committee.
- Member of College Football team.