# ABINASH MAHARANA

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## EDUCATION

**B. Tech + MS by Research in Computer Science and Engineering (Dual Degree)**

**International Institute of Information Technology, Hyderabad**

📅 July 2018 – July 2023   📍 CGPA: 8.18/10

* Merit list - Spring 2021, Monsoon 2022

## WORK EXPERIENCE

### Freelance Developer
**fiverr.com**

📅 May 2020 – July 2020   📍 Remote

- Worked on various projects for clients building full stack web applications, standalone Single Page Applications, and web design.
- Technologies: MERN Stack, Firebase Firestore.

### SDE Intern
**Salesforce**

📅 May 2022 – July 2022   📍 Hyderabad, India

- Improved an existing full stack web application by using open-source as well as internal technology. Additionally also won the intern hackathon during that period.
- Technologies: Node, Redis, React

### Software Developer
**Salesforce**

📅 July 2023 – Present   📍 Hyderabad, India

- Worked on Salesforce Reports, an integral part of their core application that has billions of instances.
- Worked on an internal codebase based on Java and Javascript.

## RELEVANT COURSEWORK

- **Core Computer Science** : Data Structures and Algorithms, Introduction to Software Systems, Design and Analysis of Software Systems, Computer Systems Engineering, Algorithm Analysis and Design, Software Programming for Performance, Database Systems, Data and Applications.
- **ML & AI** : Machine, Data, and Learning , Statistical Methods in AI , Data Analytics, Computer Vision.
- **Mathematics** : Probability and Statistics, Linear Algebra, Discrete Structures, Real Analysis, Introduction to Information Security.
- **Miscellaneous** : Introduction to IoT, Embedded Systems Workshop.

## ACHIEVEMENTS

**ACM-ICPC 2018 :**
- **Team rank 867** in ACM ICPC online round.

**Competitive Programming Profile :**
- **Rated 1833** in **CodeChef**

**Other Scholastic Achievements :**
- Selected for **National Talent Search Examination** Scholarship Award-2015-16.
- Recommended, with an **All India Rank 482** for **KVPY** Fellowship Award-2016-17.

## SKILLS

- **Languages** : Java, C, C++, Python, JavaScript.
- **Technologies** : MongoDB, React JS, Node JS, Bash, MySQL, PHP.
- **Data Science and ML** : Pandas, numpy, scikit-learn, PyTorch, OpenCV.
- **Miscellaneous** : Linux, x86-Assembly, Git, Arduino.

## PROJECTS

### JetPack Joyride
- Created a terminal-game replica of the famous game Jetpack Joyride in Python without the use of external libraries such as PyGame. [ **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** ]

### In-Memory Key-Value Storage Software in C++
- Built an in-memory key-value storage system in C++ which supports multithreading. Keys and values were char strings. Built without using any boost libraries. [ **C++, Performance Programming, Multithreading** ]

### Content Management System
- Created a MERN web application that implements the use of most Firebase features like authentication, realtime database, storage to provide login/signup, image uploading. Link. [ **MERN Stack, Firebase** ]

### Image Classifier
- Developed an multi-class image classifier using PyTorch to predict the class of an image. Used various concepts from machine learning to train a Neural Network manually. [ **Deep Learning, ML, Computer Vision, PyTorch** ]

### SQL Engine Expansion
- Improved a simple SQL engine to add features such as support for Matrices, indexing and bulk queries. [ **C++, Relational Database** ]

## RESEARCH

- Data mining research at Data Science and Analytics Center, IIIT-H : Worked on pattern mining algorithms and applications. Published **a full research paper** in the reputed conference PAKDD 2023 on the topic of Knowledge Graphs (2020 - 2023)

## EXTRACURRICULARS

- Volunteered at TEDx Hyderabad (2018).
- Outreach team at Alumni Cell, IIIT-Hyderabad (2019-2023).