Arvind Murali   190100074

Mechanical Engineering   B.Tech.

Indian Institute of Technology Bombay   Gender: Male

DOB: 4/18/2001

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2023	
Intermediate	CBSE	Maharishi Vidya Mandir	2019	94.60%
Matriculation	CBSE	Maharishi Vidya Mandir	2017	95.00%

Pursuing a **minor** in **Computer Science Engineering**

SCHOLASTIC ACHIEVEMENTS

- Secured **All India Rank of 442** out of **2,00,000** candidates in **JEE Advanced (2019)**   ['19]
- Secured **All India Rank of 1974** in **JEE-Mains (2019)** out of 1.2 million candidates   ['19]
- Received **AA** grade in for good performance in **Biology** and **Engineering Mechanics**   ['20]
- Awarded the prestigious **KVPY fellowship** by **IISc Bangalore**, funded by the GOI   ['18,'19]

INTERNSHIPS

Maintwiz Technologies (SaaS based Industry 4.0 Solution Provider)

Software Developer   [Nov'19 – Aug'20]

- Designed and developed a dashboard for a key performance indicator - **Overall Equipment Effectiveness [OEE]** (Used by manufacturing companies to measure operational efficiencies)
- Developed an application for **Line Balancing**, an algorithm used by manufacturing companies to optimise assembly line efficiencies based on customer demand

Technical Analyst   [May'21 – Jul'21]

- Worked on machine learning models for **Predictive Maintenance,** using historical data to predict equipment failure with AWS Machine Learning tools - **SageMaker** and **Lookout For Equipment**
- Automated end-to-end process for Reporting and site creation using AWS Serverless tools – **Step Functions** and **Lambda**

Naethra Technologies (Custom Application Development Company)

Process Designer - Loyalty Points   [Nov'19 – Aug'20]

- Designed **process flow charts** for the implementation of loyalty points at Rathna Fan House, India's top dealer in air-conditioners and fans

Process Designer - CRM and Telephony Integration   [May'21 – Jun'21]

- Designed and implemented a **CRM** along with telephony integration to track and manage leads for Rathna Fan House

Asian Paints (Leading Paint Manufacturing Company)   [Dec'20]

In-Plant Training at Sriperumbudur plant

- Worked as part of the Instrumentation team for the installation of a Heat Recovery Unit (HRU)
- Assisted in the designing of Remote Input Output (RIO) panels for the HRU based on the scheme for the project
- Understood the end-to-end process and operations of the plant (Manufacturing of Water Based Paints)

TECHNICAL PROJECTS

LIBRARY MANAGEMENT AND BLOGGING APPLICATIONS   [Feb'20-May'20]
Web Applications

- Designed and developed a web application using **JSP, Spring Boot Framework and PostgreSQL** database to manage the lending of books.
- Designed and developed a blogging application using **Bootstrap** and **Django Framework**
- Deployed the web applications on **Amazon Web Services** (**AWS**) and **Digital Ocean**

PRO BONO CONSULTING FOR A START-UP [Apr'20-May'20]
Operating Model
- Assisted in the technical feasibility study for a coconut harvesting service startup
- Developed the **operating model (revenue and cost)** for the coconut harvesting service startup to analyse the commercial viability of the venture
- Built the P&L statement for the first year of operations and identified new opportunities to increase the customer base

TRAINEE | UMIC [INNOVATION CELL] [Aug'19-May'20]
Part Of the Self Driving Car [SeDriCa] Team

- Worked under the **Controls** subsystem and understood the working of **PID, MPC** and **NMPC** controllers
- Part of the **Sensors** subsystem and understood the working of **RADAR** and **LIDAR**
- Learned the basics of **Robotic Operating System** [**ROS**]

XLR8 COMPETITION [Aug'19]
Electronics and Robotics Club

- Designed and engineered a Bluetooth controlled 4-wheel multi-terrain bot, operated using Differential Mechanism, which completed the competition racetrack
- Built and designed a chassis with appropriate mechanical parameters like ground clearance, RPM and power output of DC motors etc.
- Successfully manoeuvred the bot through a series of hurdles and obstacles, to complete the track

TECHNICAL SKILLS

Programming Languages	Java, C++, HTML, Javascript, jQuery
Frameworks	Spring MVC, Spring Boot, Django
Other Software	Eclipse IDE, Android Studio
Databases	PostgreSQL, MySQL
Cloud Technologies	Amazon Web Services, Digital Ocean
Simulation and CAD Software	SolidWorks, AutoCAD

COURSES UNDERTAKEN

- **Machine Learning:** Finished the **Machine Learning A-Z: Hands-On Python & R** course by the SuperDataScience team
- **Web Development** : **Spring Boot Framework** by **Chad Darby**
- **Finance :** Completed **Finance** Bootcamp by **FinShiksha**
- **Minor Course** : Computer Networks, Data Structures And Algorithms, Design and Analysis of Algorithms*

EXTRA CURRICULAR

* to be completed by Spring'21

- Successfully completed a year long **Vocal Music** course under the NSO programme, affiliated to the **MHRD Department of Govt of India**
- Part of winning team in **Chess** in **Institute General Championship**
- Tamil Nadu Under-11 **State Chess Championship 2011 and 2012** Winner
- Played at the Under-11 **National Chess Championship** and ranked 12th
- Ardent Carnatic music practitioner and have given stage performances as a vocal Carnatic musician at various programs
- Regularly solve Sudoku puzzles