ADITYA SARIN

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EDUCATION

Master's Computer Science | **Virginia Tech** | Blacksburg, Virginia | **GPA: N/A**   May 2023
B.Tech Electronics and Telecom Engineering | **NMIMS, School of Engineering** | Mumbai, IN | **GPA: 3.7/4**   May 2021

EXPERIENCE

Software Developer Intern | **Futuryze Digital** | Mumbai, IN   *Jan 2021 – July 2021*
- Converting RPG desktop website to mobile version using **SASS** and **VueJS** driving traffic with an increase of **20%**.
- Worked on backend API development of fireside using **PostgreSQL** and Adjonis thereby integrating API from Agora.
- Used **ReactJS** to connect **GraphQL** API with backend application, integrating Hasura and enhancing site speed by **43%.**
- Automated zoom bot using NodeJS, enhancing the query execution for desktop devices.

Software Developer Intern | **Symphony Fintech** | Mumbai, IN   *May 2019 – July 2019*
- Developed XTS platform using **Angular.JS** and **JQuery** along with socket.io that attracted 12,000 traders in 2 months.
- Converted wireframes into CSS and JavaScript code with **Bootstrap**, JQuery and **Material UI**.

Co- Head | **Technotix** | Mumbai, IN   *May 2019 – Jan 2021*
- **Co-headed** the technical community to represent university in **3** competitions.
- Developed an autonomous rugby robot,3 soccer robots, line following robot and won **2nd place** for drone competition.
- Created a Micro-mouse robot and programmed for shortest path algorithm such as Dijkstra's algorithm and Bellman flood-fill algorithm.

PROJECTS

Accentuate E – Commerce
- Built frontend using ReactJS that keeps track of users, products and the order being placed with a backend of **Django** that is hosted on **AWS RDS** and **S3** bucket.
- Operated admin as well as user authentication where users can register to browse products, place orders and leave ratings, while the admin panel allows creation of products, mark delivery and manage users and orders.
- Website now generates traffic of more than **200** weekly users and more than **80** registered members with **50+** orders.

Full Stack Blogging Application
- Created the frontend using **NextJS** while ExpressJS used at the server side with **MongoDB** database to be hosted on digital Ocean Server with **NGINX** as a reverse proxy.
- Implemented login using **JWT** and social login with SEO friendly blogs with meta descriptions, tags and blog categories.
- Admin **CRUD** operations as well as search feature included with comments and pagination as extra features.

Covid-19 Safety Model
- Developed a mask detection algorithm using YoloV3 **(97%)** integrated with website using **NodeJS** and **Firebase** for server-side rendering and using Vanilla JavaScript for frontend.
- Built a mobile application using **Flutter** that displays employee data and uses device BLE to connect with smart watch.
- Integrated a covid-19 tracker using foreign **REST API** to display statistics related to the pandemic.

Waste Segregation and Management Using Convolutional Neural Networks (Research Published)
- Led project team to Generate a Convolutional Neural Network Algorithm to classify waste images into categories. Obtained a training accuracy of **83.77%** and a testing accuracy of **81.25%**.
- Applied five standard CNN architectures – VGG-16, Dense-Net, Inception-Net, Mobile-Net and Res-Net and implemented them with the highest test accuracy of **92.65%.**

An Approach to Secure IoT Networks with Encryption and Decryption Techniques (Research published)
- Processed an AES algorithm to secure data bits and a two-stage Encryption and Decryption algorithm to secure IoT device connection, thereby designing our own frame structure to encode and encrypt data bits that follow UART protocol.
- Developed this model by encoding data bits with 3 level security and achieving testing accuracy of **86%.**

SKILLS

Web: HTML, CSS, SASS, ReactJS, VueJS, NodeJS, Django, AngularJS
Programming: C/C++, Python, JavaScript, Dart
Databases: MySQL, MongoDB, PostgreSQL
Python Libraries: Scikit-Learn, TensorFlow, Keras
Others: AWS EC2, RDS, S3, Kubernetes, Docker, REST API, GraphQL, Git, Firebase, Flutter, Android Studio, VS Code

ACTIVITIES

- **Student Ambassador Award** for Class of 2021. Ranked **1st** in the Department.
- Ranked in **top 20** among 200 in the Polarizer 2018 competition for our rotating dual axis solar tracker project.
- Running a Blog website related to technology and learning.
- Achieved **A+ grade** in a 2-week Industrial Automation Workshop, by International Society of Automation.
- Achieved **86%** in Data structures and Algorithms specialization. Attended Python Bootcamp in 2018
- Volunteered at Akanksha NGO to teach primary education to children with little or no access to it. (6 months)