

ADITYA SARIN

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EDUCATION

Master's Computer Science | Virginia Tech | Blacksburg, Virginia May 2023
Coursework: Intermediate Data Structures & Algorithms, Software Engineering, Information Storage & Retrieval
Bachelor's Electronics and Telecom Engineering | NMIMS, School of Engineering | Mumbai, IN | **GPA: 3.7/4** May 2021

SKILLS

Web: HTML, CSS, SASS, React, Angular, Node, Django, Bootstrap
Programming: C, C++, Python, JavaScript, Java, Dart
Databases: MySQL, MongoDB, PostgreSQL
Python Libraries: Scikit-Learn, TensorFlow, Keras
Others: AWS EC2, RDS, JUnit, REST API, JSON, GraphQL, Git, Firebase, Flutter, Android Studio, VS Code, IntelliJ

EXPERIENCE

Software Developer Intern | Futuryze Digital | Mumbai, IN Jan 2021 – July 2021

- Converted RPG desktop website to mobile version using SASS, driving traffic with an increase of **20%**.
- Worked with senior developers on API development using PostgreSQL thereby linking **25** API endpoints from Agora.
- Used ReactJS to connect GraphQL API with backend application, integrating Hasura and enhancing site speed by **23%**.
- Accelerated the query execution by **2.9** seconds by automating join meet functionality using NodeJS.

Software Developer Intern | Symphony Fintech | Mumbai, IN May 2019 – July 2019

- Designed XTS platform using AngularJS and JQuery along with socket.io that attracted **12,000** traders in 2 months.
- Converted **50+** wireframes into CSS and JavaScript code with Bootstrap, JQuery and MaterialUI.

Co - Head | Technotix | Mumbai, IN May 2019 – Jan 2021

- Co-headed** the technical team to represent the university in World Robotics 2019, Robocon 2020, IIT Techfest 2020.
- Developed an autonomous rugby robot, 3 soccer robots, and achieved **2/58 rank** for drone competition.
- Programmed a Micro-mouse robot for shortest path algorithm such as Dijkstra's algorithm and Bellman algorithm.
- Organized technical talks and daily meetings among team members, to maintain consistency on tasks assigned.

PROJECTS

Accentuate E - Commerce

- Built frontend using ReactJS that keeps track of **50+** products and their orders with a backend of Django.
- Operated admin and user auth to create products, register, browse products, place orders and leave ratings.
- Maintained 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 connecting it to MongoDB database, hosted on digital Ocean server with NGINX.
- Implemented login using JWT and social login with SEO friendly blogs, meta descriptions, **10+** tags and **5** blog categories.
- Revamped with admin CRUD operations as well as search feature with comments and pagination as extra features.

Covid-19 Safety Model

- Collaborated with 3 team members to design YoloV3 mask detection algorithm (**97%**).
- Launched website using NodeJS and Firebase for server- side rendering using Vanilla JavaScript for frontend.
- Facilitated ease of use by building an application using Flutter, displaying employee data with Bluetooth functionality.
- Strengthened end-to-end functionality with a covid-19 tracker using REST API to display statistics.

Waste Segregation and Management Using Convolutional Neural Networks ([Research Published](#))

- Led project team to generate an innovative Convolutional Neural Network algorithm to classify **21,000** waste images.
- Analyzed five standard CNN architectures – VGG-16, Dense-Net, Inception-Net, Mobile-Net and Res-Net.
- Attained an accuracy of **83.77%** and co-authored research paper for the same.

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 algorithm to secure IoT device connection.
- Proposed and designed our frame structure to encode and encrypt data bits that follow UART protocol.
- Enhanced this model by encoding data bits with 3 level security and achieving testing accuracy of **86%**.

ACHIEVEMENTS & 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 model.
- Running a [Blog](#) website related to technology and learning.
- Achieved **A+ grade** in a 2-week Industrial Automation Workshop, by International Society of Automation.
- Volunteered at Akanksha NGO to teach primary education to children with little or no access to it. (6 months)