

# Ayan Adhya

## Indian Institute of Technology, Goa

Third Year Undergraduate, Mechanical Engineering  
e-mail: [ayan.adhya.18003@iitgoa.ac.in](mailto:ayan.adhya.18003@iitgoa.ac.in)  
Mobile: +91 8320653959  
Portfolio: [ayaniitgoa.github.io/portfolio/](https://ayaniitgoa.github.io/portfolio/)  
LinkedIn: [linkedin.com/in/ayan-adhya/](https://linkedin.com/in/ayan-adhya/)  
GitHub: [github.com/ayaniitgoa](https://github.com/ayaniitgoa)

### Education

<b>BTech, Mechanical Engineering: Indian Institute of Technology Goa</b>	CGPA: 7.5/10	2018 - PRESENT
<b>Class 12, CBSE: Navrachana School, Sama</b>	Aggregate: 84 %	2018

### Experience

#### Foodwagon Private Ltd.

[May-June 2020]

##### Summer Software Development Intern

- Worked with the development team to implement data strategies, build data flows and developed data models in **PostgreSQL**.
- Developed an entire end-to-end user authentication system in Django.
- Created optimized RESTful APIs for exposing the backend functionality to the UI/UX.
- Added the Filter functionality which includes taking filter inputs from the user and making calls to the API routes.

#### Verzeo EduTech

[May-July 2020]

##### Summer Machine Learning Training

- Analysed a student performance dataset to find the causes of lower marks using **NumPy**, **Pandas** and **Matplotlib**.
- Trained a model to predict the cost of used cars using XGBoost regressor and achieved an accuracy of 95%.

#### Coding Club, ArchiTechs

##### Programming Head

May 2019 – May 2020

- Led a team of **15+ students** and went on to make 4+ websites for my college.
- Contributed to the design and used Adobe Xd for the same.
- Managed a group of 5 students and successfully developed a website for IIT Goa's First Cultural Fest.

### Projects

#### Chrome Extension For Text Summarization [Extension] [GitHub]

[June-August 2020]

- Developed a chrome extension that lets users summarize their long texts by extractive summarization.
- Users can also provide a URL and using **web scraping** (Beautiful Soup) text is fetched.
- Summarization is done using **Natural Language Processing** (spaCy model) in Python.
- Used Vanilla **JavaScript**, HTML and CSS in the frontend and **Flask** in the backend.

#### All In One | Every College Student's Website [GitHub]

[May-July 2020]

- Developed a Full-Stack web application using **ReactJS**, **NodeJS** and **MongoDB** to help students share their information about their internship, placement, projects, ask questions, provide other valuable experiences and connect with their juniors.
- The website has 5 sections namely 'Questions Page', 'Profile Page', 'Projects Page', 'Interview Experiences Page' and 'To-do List Page'.
- Created robust and secure **RESTful APIs** and integrated Google and GitHub's strategies for third party O-auth authentication using PassportJS's authentication middleware.

#### Social Media Application [GitHub]

[May-June 2020]

- Developed a Full Stack secure social media app using **GraphQL** which allows users to post and comment on others' post.
- Built GraphQL APIs using Apollo Server along with NodeJS in the backend. Used Apollo Client in ReactJS to make queries and mutations in the frontend.
- Safeguarded the web-pages against database attacks like SQL Injection and Cross-site scripting (XSS).

#### Newton Raphson and Secant Method Implementation [Website] [GitHub]

[February-April 2020]

- Implemented the iterative Newton Raphson and Secant methods to solve the Colebrook's implicit equation to analyse the behaviour of liquid during a pressure or flow rate drop in a circular pipe.
- Used Object Oriented Programming (OOP) principles in **Python** and plotted a Moody Diagram using Matplotlib and **ChartJS** in **Django**.
- Got an accuracy of 95% when compared to the experimental values.

#### PDF Filter [GitHub]

[January-February 2020]

- Developed an application using Django where users can search and filter their uploaded documents based on any word or sentence present in any of the documents.

### Skills

**Programming Language:** C, C++, Python, JavaScript, Java

**Technologies:** ReactJS, React-native, NodeJS, ExpressJS, GraphQL, Django, Flask, HTML, CSS, SQL (PostgreSQL, MySQL), NoSQL (MongoDB)

**Machine Learning:** NumPy, Pandas, Scikit-learn, OpenCV, TensorFlow

**Other:** Competitive Programming, Docker, Git, LaTeX

### Positions of Responsibilities

- Programming Head of IIT Goa's Coding Club
- Represented IIT Goa at Inter IIT Sports Meet (IIT Kharagpur, 2019) and BITS-Spree (Football)

### Achievements

- Secured Rank 1 in Codigo (Intra-College Coding event) among 35+ participants
- Acquired Gold Medal in NGSE mains (National Genius Search Examination) 2018 with 90+ percentile.
- Cleared Stage 1 of Smart India Hackathon (SIH) 2019