Azad Prajapat

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Academic Qualifications

Year	Degree/Certificate	Institute	CPI/%
2023(Expected)	B.Tech(CE)	Indian Institute of Technology, Kanpur	7.4/10
2018	RBSE(XII)	Aastha Academy Sikar	90%
2016	CBSE(X)	Prince Academy Sikar	10/10

Technical Skills

Languages: C, C++, C#, Dart, Javascript
Framework: Flutter, Xamarin Forms, NodeJS.
Utilities: Git, Firebase, Android studio, AWS, HTML, CSS.
Databases: MongoDB, Google Firestore.

Work Experience

ETH ZURICH, SWITZERLAND | Software Development   *(Mar'22 - Jul'22)*

- The objective was to build a platform to teach math using the latest cutting-edge research on human cognition and learning.
- Developed Back-end using **NodeJS**, **MongoDB** database schemas, and secured APIs by encrypting with **JWT Tokens**.
- Implemented **100+** role-based **REST APIs** and features to track user progress and log user activities for analytical purposes.
- Developed UI using **Xamarin Forms** and implemented **Socket connections** between client and server for **real-time** interaction.

SUNSCAPE GREEN ENERGY | Research and Software Development   *(Jul'20 - Present)*

Mentor: Prof. Bharat Lohani, IIT Kanpur
- Developed an operational prototype that can estimate solar potential at a point considering shadow due to surrounding objects.
- Build User-Interface and Algorithm to capture and segment surrounding in sky and non-sky region using **detectron2** by **Facebook**.
- Used **Grena Model** to track the sun's position and Hybrid model to find solar irradiance, potential, and visibility at any instance.
- The product was tested for locations across the country and found 82% accurate in field conditions corresponding to **500+** readings.
- The project is currently at **TRL5** and submitted to **MNRE, Govt. of India** for funding to take it to **TRL9/10** and to the users.

C3IHUB, IIT KANPUR | Web Security Testing   *(Aug'21 - Present)*

- Prepared Security vulnerability reports for various websites to report findings regarding security flaws and mitigation suggestions.
- Explored previously identified common vulnerabilities **CVE** on the services used on both client and server side of the web server.
- Performed attacks such as **Phishing, Man-in-the-Middle, SQL injection, and XSS injection** to secure the web server.

REGION INFINITY PVT. LTD. | Application Development   *(Sep'21 - Feb'22)*

- The objective was to build an Enquiry Based Learning application by implementing a virtual chatbot in the application.
- Spearheaded the complete project by assisting cross-function teams and interacted with client to define project goals and deadlines.
- Processed the data including mathematical expressions and equations to **latex** for rendering on the User-Interface in **Flutter**.

MAKOM DELIVERY SERVICES | Full Stack Development   *(May'21 - Jul'21)*

- Collaborated in a team of **8** developers for the development of a 3 module (seller, driver, and admin) based delivery application.
- Implemented features like management of inventory, placement of orders, secure verification and tracking the status of orders.
- Built a robust platform using **NodeJS**, **Flutter**, **MongoDB**, **Firebase** (Messenging), **Stripe**, and **AWS** (Cloud Server).

COVAC HELPER | Mobile App Development ⚇ ▷ (Self)   *(Apr'21 - Jun'21)*

- Developed a fully operational Mobile App for Android Users to help them to vaccinate at a faster pace for Covid'19 in India.
- Provided relevant information and fastest update on the vaccine availability with smart notification in nearby areas.
- Accumulated **500+** user base in the beta release with an average rating of **4.9/5.0** corresponding to **50+** reviews.

BOTTOM STREET, PAPRCLIP PVT. LTD. | Mobile App Development   *(Jul'20 - Aug'20)*

- Developed a mobile app with a responsive user interface to faccilitate stock data of National & Bombay Stock Exchange.
- Implemented **REST APIs** and **WebSocket** to serve live charts and prices of Forex, Cryptocurrency and Mutual funds.
- Integrated **Rajorpay** to enable payment collection and biometric authentication to improve the security of the application.

Positions of Responsibility

Head Web & App | Antaragni'21 🌐 ▷   *(Jun'21 - Apr'22)*

- Managed and conducted a comprehensive recruitment process for the post of Web organizers at Antaragni'21, IIT Kanpur.
- Spearheaded a team of **10**, responsible for ideation, development, marketing & on-time deployment of the app & website.
- Regularly updated the website and app to ensure that relevant information is properly conveyed to the participants.

- Provided a flexible UI to update the content of the mobile application in a user-friendly way and accumulated **1K+** user base with an average rating of **4.9/5.0** corresponding to **90+** reviews.

Project Mentor | Association for Computing Activities, IIT Kanpur *(Apr'21 - Jun'21)*

- Mentored a group of **15** students and trained to learn Flutter Development by organizing lectures and doubt-solving sessions.
- Designed weekly tasks and guided on User-Interface development using Flutter, Dart Programming, Networks and REST APIs.

Coursework *(Online Certified Course) **(Ongoing)*

Fundamentals of Computing(C Programming)	Data Structure and Algorithm*
The Complete NodeJS Development*	Ethical Hacking*
Introduction to Machine Learning**	Digital Communication Network**

Others

- Developed a fully operational Mobile App(COVAC HELPER) for Smartphone Users to vaccinate at a faster pace for Covid'19.
- Rewarded **BugBounty** for reporting Medium and Mild Severity Vulnerability on HelloIITK(Online Teaching Platform at IITK).
- Developed an Image Stitching Library (OPENCV AWESOME) for the Flutter users to utilize OpenCV stitching APIs in Flutter.