Aditya Sharma

B. Tech

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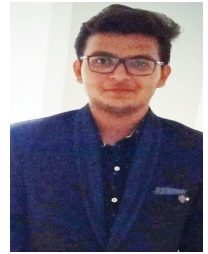
Education Details

Program	Institute	Year	%/CGPA
B. Tech	Indian Institute of Technology, Tirupati	2023	8.74 CGPA
12th CBSE	Varda Shiksha Sankul, Neem ka thana	2019	90.8%
10th CBSE	Birla School Pillani	2017	9.4 CGPA

Areas of Interest

- Competative Programming, Software Development, Web Development, Machine Learning, Game Development, Parallel Computing, Capture The Flag, App Development, Management and Leadership

Technical Proficiency

Languages	:	C, C++, Javascript, Python, Java, C#
Web Development	:	Reactjs, Nodejs, Expressjs, Mongo DB
Tools	:	ServiceNow, Git, Visual Studio Code, Android App Studio, Unity, Boomi, MPI, Charm++
Operating Systems	:	Windows, Linux
Data Markup Standards	:	HTML, CSS, Markdown

Experience

- **Software Engineering Intern**
  (**Guide :** Venkatesh Nalam (Senior Manager, Application Development ServiceNow))[**May 2022 - July 2022**]

  - The team was developing integrated systems using the Boomi Platform, where they had multiple projects, and corresponding to each project, they had various systems involved in the integration.
    To test an integration, one has to manually go to the Boomi platform and check it via the process reporting page. Information related to integration and instances has to be checked manually. This procedure took time for a developer and negatively affected the developer's productivity.
    As an intern I automated this process, improve the developer's experience, and check that the systems were connected to the correct instance for each project. Furthermore, report errors like the wrong auth, server down, wrong instance tested, payload errors, and possibly more. And the entire process was being executed in a parallel and asynchronous way, and an email notification was sent to the developer after completion of the task.

Projects

- **Code Vision - Software Tool**
  (**Guide :** Dr. Sridhar Chimalakonda)   [**March 2022 - May 2022**]

  - **Abstract**: A Visual Studio Code extension developed explicitly for blind programmers to help them "visualize" the code using file reading methods. It parses the entire file structure and provides easy access to blind programmers to navigate the folder structure with the help of just three buttons, and for python files, the tool will give more details like classes, functions, variables, and loops in the code. Syntax errors are also being determined and reported to blind programmers.
    https://github.com/AMITKESARI2000/codeVision

- **Meet Your Dronacharya - Web Development**
  (**Guide :** Dr. Sridhar Chimalakonda)   [**September 2021 - December 2021**]

- **Abstract**: Developed a website using MERN stack to tackle career-related problems, advising newbies about careers, giving them conversations with experts, a place containing information on all essential exams, and sharing study materials. It contains features of chat using socked.io, login verification and google signup, verification using nodemailer, spam detection using API calls, and CRUD operations on various fields.
  https://github.com/PandaKing9660/MeetYourDronacharya

- **Helping Nemo - Game Development**
  (**Guide :** Dr. Sridhar Chimalakonda)   [**January 2022 - February 2022**]
  - **Abstract**: Developed a Unity-based 2D game using C# language to convey information about water pollution. The player is a ship called Nemo, which collects garbage from the sea, releases stuck animals from the net, and collect spilled oil from tankers in a given amount of time. It Contains a Survival mode and a Story mode for players to play.
    https://github.com/emanisowmya/Helping-Nemo

- **UwU Compiler - Programming Language Compiler**
  (**Guide :** Dr. Venkata Ramana Badarla)   [**January 2022 - May 2022**]
  - **Abstract**: Creating a programming language from scratch with the help of the lex tool and the yacc compiler. Accomplishing lexical, Syntax, and Semantic analysis, generating IR code and creating symbol tables, implementing error detection, TAC optimization, and pre-processing.
    https://github.com/AMITKESARI2000/UwU%5fCompiler

- **Histainability - App Development**
  (**Guide :** Dr. Sridhar Chimalakonda)   [**August 2021 - September 2021**]
  - **Abstract**: Developed an Andriod App in Kotlin providing users the information about SDGs, using API call to google n-grams to find out how the trend and talks about SDGs have changed over time, giving students a history lesson and quiz feature to test it.
    https://github.com/Anand1310/histainability

- **SISA HYBRID - FRAMEWORK**
  (**Guide :** Dr. Raghavendra Kanakagiri)   [**May 2021 - July 2021**]
  - **Abstract**: Implementation of a framework tool in C++ for SISA Hybrid graphs and optimizing it to perform set operations like intersection, union, cardinality, and difference among sets that describe a graph's node, further parallelizing it.

- **Bytify - Simulator**
  (**Guide :** Dr. Raghavendra Kanakagiri)   [**Jan 2021 - April 2021**]
  - **Abstract**: Developed a Simulator for MIPS architecture in python, an independent tool for writing, editing, and checking MIPS code. It also gives a diagrammatic analysis of the pipeline and cache implemented in the given design, helping the user understand these concepts quickly.
    https://github.com/PandaKing9660/Bytify

- **AAC Website - Web Development**
  (**Guide :** Academic Affair Council of IIT Tirupati)   [**July 2021 - September 2021**]
  - **Abstract**: The website made for the Academic Affairs Committee of IIT Tirupati is created to ensure that the students have a portal for all academic-related activities. Worked on basic structuring of the website using Reactjs and integrated the complaint forms with Google Sheets using API calls.

- **Hostel Seva - Web Development**   [**April 2021 - June 2021**]
  - **Abstract**: Build a website for the Institute's mess using MERN stack, ordering food from the canteen or mess, making complaints, and having a user authentication feature. The website will help in maintaining the smooth functioning of hostel activities.
    https://github.com/PandaKing9660/hostel-seva

- **Soil Informer - Web Development** [**Sep 2020 - Nov 2020**]
  - ○ **Abstract**: The website made by our team using MERN stack helps farmers understand the soil in their area and suggests ways to improve conditions through games, memes, blogs. https://amitkesari2000.github.io/eco-project-front/#/home

- **KBC quizmaster** [**March 2022 - March 2022**]
  - ○ **Abstract**: I was responsible for conducting a KBC-styled quiz for Tirutsava, the annual techno-cultural fest of IIT Tirupati. To make the quiz more user-friendly, improve the user experience, and elevate the standards, I developed a website using the MREN stack in which a KBC quiz can be hosted. The website was a full-stack project with the frontend and backend designed and developed by me. The quiz master can upload questions and start the quiz. Features include lifelines, checkpoints, timer, change question, 50-50, and much more.

Relevant Courses

- Data Structure and Algorithms
- Operating Systems
- Machine Learning
- Natural Language Processing
- Compiler Design
- Ethical Hacking
- Discrete Maths

- Object Oriented Programming
- Database Management Systems
- Artificial Intelligence
- Computer Organisation
- Computer Networks
- Probability and Statistics
- Linear Algebra

Achievements

- Secured 265 Rank in ICPC Gwalior-Pune 2020 Regional Round
- Secured 688 Rank in ICPC Amritapuri 2020 Preliminary Round
- Five Star rating on Codechef
- Specialist on Codeforces
- Shortlisted in Hack of PI Hackathon by PAN IIT for our App-dev project Histainability
- Rank-1 and 57 in Codechef long challenge May 2021 and Cook-off 2020 respectively.
- Participated in Student Cluster Competition - 2021

Positions of Responsibility

Contingent Leader - Inter IIT Tech Meet 10.0 [**Feb 2022 - April 2022**]

- Having the responsibility of selecting student teams for events, managing their meetings, provide them with all the essential information and announcements by organizing IIT. Submitting their solutions and discussing the final scoring with the organizing team.

Head – Digital Wizards (Code Club), IITT [**July 2021- May 2022**]

- Managing all coding-related activities in the institute, such as hosting contests, conducting workshops, and collaborating with other institutes and industries for various events to develop a coding culture in the institute.

Core Member - Event Management Team, Tirutsava 2022 [**December 2021 - April 2022**]

- As member of Events management team, I had to coordinate with event management head and schedule events, check availability of rooms, get props for events, make budget, guide event coordinators.

Core Member - Technical Affairs Committee, IITT [**July 2021 - May 2022**]

- Helping and Managing related technical activities done by the institute and ensuring that every event works smoothly and has a good impact on all participants.

Quizmaster and KBC Event Organizer – Tirutsava 2022   [March 2022 - March 2022]

- I was responsible for conducting a KBC-styled quiz for Tirutsava, the annual techno-cultural fest of IIT Tirupati. To make the quiz more user-friendly, improve the user experience, and elevate the standards, I developed a website using the MREN stack in which a KBC quiz can be hosted.

Volunteer - Ug buddies, IITT   [July 2020 - present]

- The UG Buddies is a program under the Guidance and Counselling Unit, which deals with the problems and guidance of the incoming batches. Volunteered in the program and currently advising ten juniors under this.

Class Representative - CSE 2nd year   [July 2020 - July 2021]

- Worked as a communication bridge between department and students to ensure the smooth flow of academic activities and raise student concerns.

Web-Design Event Organizer - Tirutsava 2021   [Jan 2021- Feb 2021]

- Organized, hosted, and conducted a web design contest in the annual fest of IIT Tirupati.

Co-Coordinator – Digital Wizards (Code Club), IITT   [July 2020 - July 2021]

- Guided students in their coding journey in the field of competitive programming and web development.

Co-Coordinator – Actomania (Acting Club), IITT   [July 2020 - July 2021]

- Helped students in overcoming stress with acting/writing activities.

Head - ACM Student Chapter (IIT Tirupati)   [July 2022 - present]

- As a student head i am responsible for conducting and managing all the ACM related events in the institute and collaborate with them to increase the awareness regarding ACM among the students.

Hobbies and Interests

- Sports like Basket ball, Swimming and Chess

- Learning new things related to Tech, Geo politics, History

- Acting, Music, Movies and pop-cultural references, Memes