# **Activities**

#### Research

9, 10 Year 6 hr/wk, 7 wk/yr Continue Co-author a research paper, under Dr. Manan Shah's guidance, a top 2% global scientist recognized by Stanford and Elsevier. Researched big data and ML applications in groundwater quality, published in Archives of Computational Methods in Engineering by Springer. IF: 9.7.

#### Research

11, 12 Year 6 hr/wk, 12 wk/yr Continue Primary Author of a research paper, under Dr. Manan Shah's guidance, a top 2% global scientist recognised by Stanford and Elsevier.

Analysed 60+ case studies from WFP and Zakat on blockchain's impact on welfare schemes in developing countries. Under publication in J. Digit. Econ.

#### **Robotics**

12 School 7 hr/wk, 12 wk/yr Continue Acted as head of software & managed a team of 20+, affiliated with Ahmedabad International School and the Indian Space Research Department (ISRO)

Co-designed a 3U CubeSat and currently developing Al-driven forest fire detection, securing ISRO sponsorship and discussing a potential launch.

# Computer/Technology

9, 10, 11, 12 Year 4 hr/wk, 8 wk/yr Continue Created multiple Open Source Projects, independent Developer - Initiated and maintained open-source projects, continuously improving them

One of them is "Sentence Completion," a web app with 200+ MCQs, used by 180+ and growing high school students globally to boost their SAT scores.

# Computer/Technology

11 School 8 hr/wk, 10 wk/yr Continue Author a paper & pitch deck for global gpu network, created a prototype and authored the LitePaper, placing 2nd in the Indian Silicon Valley Challenge.

Awarded Golden Crest for developing a solution to counter Google's ad monopoly with a mobile GPU network using federated learning and blockchain.

# Internship

11 Break 20 hr/wk, 7 wk/yr Continue

Junior backend software engineer, worked at D2Mech a startup which has serviced 1000 + and has 200 + happy customer Led Python-to-Golang migration, boosting backend efficiency 2.5x, cutting costs by 20% and 1.5x increase in requests per second.

#### Internship

10 Year 10 hr/wk, 13 wk/yr Continue Head of Artificial Intelligence department, worked with T.I.D.E., an NGO that has impacted 32,500+ lives across India through education

Created multiple Al-powered frameworks for generating study materials and automated resources, helping over 200 teachers save 60+ hours monthly.

# **Community Service (Volunteer)**

9, 10, 11, 12 Year 6 hr/wk, 12 wk/yr Continue Created my NGO: Scavenger Relief, head of the NGO, 8 members currently and affiliated with Sajan Shah's Will to Live foundation

Raised over \$10,000 which was used to give 1000+ safety kits to manual scavengers and affiliated with Will to Live to help 500+ families.

#### **Academic**

11 Break 8 hr/wk, 5 wk/yr Continue Winner of Junior Academy Fall challenge, New York Academy of Sciences - Global STEM Competition organised to identify talented students

Won for asteroid mining strategy, chosen from 10,000+ pupils worldwide. Praised by NASA scientists for ingenuity & novel space technology solutions.

## Science/Math

11, 12 Break 2.5 hr/wk, 28 wk/yr Continue Created and president of a Math base community, an independent organisation collaborated with the school to host a math-based contest

Founded an organisation with 60+ members, teaching IGCSE/A-level/IB AA & AI, and preparing students for AMC 8, 10, and 12

with custom practice sets.