Karnav

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Education

Ashoka University	*Sonipat, India*
Pg.D in Computer Science and Economics	*2024 - Present*

Fourth year with Advanced Major

Ashoka University	*Sonipat, India*
BSc in Computer Science and Economics	*2021 - 2024*

Graduated Magna cum laude, CGPA 3.85/4, with Dean's list in 5/6 semesters

Don Bosco School (DBPC) Kolkata	*Kolkata, India*
ISC - Commerce w/ Computer Science & Math	*2019 - 2021*

98.25%, with 100% in Computer Science

Experience

Lightspeed Venture Partners — *Bangalore, Karnataka*
Winter Intern — *Nov 2024 -*
- Collaborated closely with the Platforms & Investments team to source promising opportunities & talent from elite education institutions.
- Built and analyzed a dataset of founders & founding-team members from traditionally successful backgrounds based on startup trajectory.

Amuse Labs — *Bangalore, Karnataka*
AI/ML Intern — *Dec 2023 - Aug 2024*
- Created real-time forecasting dashboards processing 20+ GB of daily business and application data.
- Wrote Python scripts to parse and aggregate application logs and convert them into meaningful business insights.
- Added customer-facing long-term analytics and trends to the product codebase.

Bloom Hotel Group — *Delhi NCR*
Strategy Intern — *Jan 2024 - Jun 2024*
- Developed a market entry and product strategy, identifying optimal new locations through geospatial analysis.
- Analyzed product pricing & positioning, and benchmarked product characteristics across the hospitality & real estate industries.
- Performed market segmentation & consumer preference analysis through primary & secondary research.

FarMart — *Delhi NCR*
Strategy Intern — *Sep 2023 - Dec 2023*
- Reduced employee turnover by delivering compensation recommendations and quantifying employee experiences.
- Performed competitor analysis & industry benchmarking across agriculture & logistics to generate insights on employee turnover.
- Conducted on-ground interviews and developed a quantitative satisfaction assessment framework to analyze employee and partner well-being.

Samagra | Transforming Governance — *Delhi NCR*
Contributor - C4GT — *Jun 2023 - Sep 2023*
- Extended the ONDC-like Beckn protocol by developing an analysis framework to segment business models and integrate them into the protocol.
- Developed AI-services by leveraging NLP techniques & open-source LLMs to extend the Beckn protocol to 20+ markets and industries.

Ernst & Young — *Kolkata*
Project Intern — *Dec 2022 - Jan 2023*
- Prepared a survey report of Real Estate Investment Trust (REIT) Funds in India using competitor benchmarking & DCF analysis.
- Performed geospatial analysis to develop a geographic market entry & GTM strategy for commercial real estate in Tier-1 cities.

Center for Economic Data & Analysis (CEDA) — *Sonipat*
Intern - Data Science & AI/ML — *Dec 2021 - Aug 2022*
- Ideated and launched an analytics-focused dashboard using 2M+ datapoints from the PMGSY program.
- Implemented Named Entity Recognition and NLP techniques to achieve 95% accuracy matching on Indian data.

Trivedi Centre for Political Data (TCPD) — *Sonipat*
Intern - Data Science & Engineering — *Dec 2021 - Mar 2022*
- Implemented a real-time data delivery pipeline handling 200k+ datapoints for the award-winning Lok Dhaba project.
- Reduced app crashes and fatal errors by 100% by implementing features for a Typescript+MERN visualization web-app of >20,000 lines of code.
- Only freshman intern ever selected by the TCPD internship program.

Academic Activity

Centre for Digitalisation, AI & Society (CDAIS) — *Sonipat*
Research Assistant under Subhashis Banerjee (PhD, IISc-B) & Anustubh Agnihotri (PhD, UC Berkeley) — *Jan 2024 - Present*
- Investigated the impact of Aadhar integration on public service delivery through geospatial and econometric analysis.
- Created an all-India dataset of economic development and urban agglomeration over 50 years by analyzing historical satellite imagery.
- Developed a data scraping & cleaning pipeline for Indian governmental data across four portals, representing 200k+ documents of rich information.
- Investigated climate bureaucracy by scraping, cleaning & analyzing 140M+ datapoints of environmenal impact data across India since 2016.

Sandeep Juneja (PhD, Stanford) — *Sonipat*
Teaching Assistant — *Aug 2024 - Present*
- Served as a teaching assistant under Prof. Sandeep Juneja for the course Introduction to Machine Learning.
- Organized course content and logistics for lectures and held teaching sessions for 20+ students each.

Koita Centre for Digital Health
Sonipat

RESEARCH INTERN
Jun 2024 - Aug 2024
- Analyzed Electronic Health Records (EHR) from Max Health to investigate differential privacy risks.
- Conducted research using 3M+ records from the MIMIC dataset.

Debayan Gupta (PhD, Yale)
Sonipat

TEACHING ASSISTANT
Aug 2023 - Dec 2023
- Served as a teaching assistant under Prof. Debayan Gupta for the course Data Structures & Algorithms.
- Organized course content and logistics for 30+ lectures and held 15 teaching sessions for 20+ students each, receiving a feedback rating of 4.5/5.

Mphasis Research Grant - under Debayan Gupta (PhD, Yale)
Sonipat

RESEARCH ASSISTANT
Feb 2023 - Apr 2023
- Authored a research paper on AI/ML techniques for data augmentation and analysis under Prof. Debayan Gupta and the Mphasis Research Grant.
- Analyzed 10 datasets of 10+ million datapoints each and engineered a novel technique for synthetic data generation for training generative AI.

Debayan Gupta (PhD, Yale)
Sonipat

RESEARCH ASSISTANT
Feb 2023 - Apr 2023
- Investigated and prepared a report on the use of generative artificial intelligence for image manipulation and generation.
- Conducted and analyzed 2 behavioural surveys with Python and Flask, proving a 10% improvement of our AI model over existing alternatives.

Susmita Saha (PhD, SNBNCBS)
Sonipat

RESEARCH ASSISTANT
Aug 2022 - Sep 2022
- Assisted development on and implemented experiments to test a novel three-dimensional magnetic racetrack memory system in Mumax3.
- Implemented FFT and signal processing on a large model of magnetic interactions to analyze skyrmion stabilization.

Subhashis Banerjee (PhD, IISc-B)
Sonipat

TEACHING ASSISTANT
Aug 2022 - Dec 2022
- Served as a teaching assistant under Prof. Shubhashis Bannerjee for the course Foundations of Computer Programming.
- Organized course content and logistics for 30+ lectures and held 15 teaching sessions for 20+ students each, receiving a feedback rating of 4/5.

Honors & Awards

Nov 2024 **Winner**, Shatranj Ashoka Venture Capital Pitch — *Inter-collegiate*
Apr 2024 **Winner**, IEEE-Ashoka Data Hackathon
Mar 2024 **Winner**, Equilibrium-Ashoka Policy Hackathon — *Inter-collegiate*
Nov 2023 **Finalist**, BITS Pilani Case Competition — *Among 100+ teams*

Clubs & Societies

Ashoka Consulting Club
Sonipat

SENIOR ANALYST
2023-
- One of 23 analysts selected from 250+ applicants.
- Worked on live clients projects in the fields of real estate/hospitality and ESG.
- Helped ideate and organize two inter-collegiate case competitions drawing 100+ people.

Ashoka Computer Science Society
Sonipat

EVENTS HEAD
2024-
- Oversaw the Events department of the Computer Society, organizing technical, research-focused and outreach-oriented events for the department.

The Edict
Sonipat

STAFF WRITER
2023-
- Wrote articles on football, F1, and the rise of sports analytics and covered live intra-college sports events.

Projects

India Cadastral
Thesis

PYTHON, SELENIUM
Jun. 2024 - Present
- For my undergraduate thesis, created a cadastral map of all land-holdings in India and implemented CNNs for climate modelling.

Valuation of REITs
Delhi

PYTHON, APPSCRIPT, EXCEL
Jun. 2024 - Present
- Using cash flow and comparables analyses, I compared the valuations of India REITs.

Better xG
Delhi

PYTHON, SKLEARN, PYTORCH
Jan. 2024 - Jun. 2024
- Implemented ML forecasting methods to better predict outcomes in football, achieving SotA results.

Recourse
Delhi

TYPESCRIPT, NODE.JS, SVELTE, MONGODB
Jun 2022 - Jun 2023
- Built a full-stack website with MERN stack using scraped data from Ashoka's LMS.