

# SOHAM DE

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## EDUCATION

### ASHOKA UNIVERSITY | SONEPAT, IN

BSc in Computer Science | 3.85/4.0 | 05/2019 - 05/2022

## WORK

### MPHASIS LAB | REMOTE

SUMMER RESEARCH SCHOLAR | 05/2021 - present

- Studying PPML Frameworks (BLAZE, SecureML etc) and preparing implementation reports

### MEDIACRED | BANGALORE, IN

MACHINE LEARNING INTERN | 05/2021 - present

- Conducting exploratory research into ML interventions for Fake-News detection
- Implementing a novel Reliability and Credibility Engine for Online Media

### ASHOKA UNIVERSITY | SONEPAT, IN

UNDERGRADUATE TEACHING ASSISTANT | 08/2020 - 12/2020

- Teaching Assistant for FC-0309 (Foundations of Computer Programming)
- Conducted weekly Discussion Sections and Office Hours. Was responsible for designing and evaluating assignments as well as conducting the Puzzle Day event
- Student Feedback: 4.75/5.0 (180+ enrolled students)

## RESEARCH

### BHARATSIM | BILL & MELINDA GATES FOUNDATION

SUPERVISORS: DEBAYAN GUPTA, GAUTAM MENON | 06/2020 - 10/2020

- Implemented ETL pipelines and synthetically replicated the Indian population using GANs
- Also added polygon-based querying on the synthetic population in  $O(n \log n)$  by optimising function calls for the Visualisation Engine

### COVID-19 DATA ANALYSIS

SUPERVISOR: DEBAYAN GUPTA | 05/2020 - 08/2020

- Analysed COVID-19 data using novel curve-fitting and ML-based techniques to make low data-reliant predictions in R and Python

### COVALENT MAGNETIC TWEEZERS

SUPERVISORS: DEBAYAN GUPTA, SUBHASHIS HALDAR | 02/2020 - 04/2020

- Worked on improving Covalent Magnetic Tweezers for week-long studies of Protein chains and re-designing associated software in C#

## HONOURS

- **DEAN'S LIST** (Every Semester) | Signals a superior level of academic performance
- **ICPC NATIONAL FINALIST** | Finished 5<sup>th</sup> in ICPC for Schools 2017 (Gwalior Regionals)
- **NATIONAL TOPPER** | Scored 7<sup>th</sup> in India in ICSE 2017 (Board Exams)

## SKILLS

- **LANGUAGES**  
Python | C++ | JavaScript | LaTeX | C | Julia | R | x86/MIPS Assembly
- **FRAMEWORKS & OTHER TOOLS**  
git | React | Express | Flask | Keras | TensorFlow | OpenCV

## RELEVANT COURSEWORK

- **UNDERGRADUATE**  
Computer Security & Privacy | Linear Algebra | Probability & Statistics | Discrete Mathematics | Advanced Programming | Algorithms & Data Structures | Computer Organisation
- **WINTER & SUMMER SCHOOLS**  
Applied Machine Learning and Data Science (IIT Kanpur) | Advances in Practical Multiparty Computation (Bar-Ilan University; reviewed *online*)
- **MOOCS**  
Deep Learning Specialisation | TensorFlow Developer Certification

## OTHER ACTIVITIES

- **CS REPRESENTATIVE | ASHOKA UNIVERSITY**  
As the CS Student Representative, I work with the Department of Computer Science, Ministry of Academic Affairs (SG) and the Academic Advisory Board
- **CS SOCIETY | ASHOKA UNIVERSITY**  
I conduct bi-weekly Workshops and Events for 70+ active members on Development and Machine Learning
- **WiCS RESEARCH READING GROUP | ASHOKA UNIVERSITY**  
I've presented multiple ML papers (from NIPS, ICLR, PRML etc) to senior undergraduate and PhD Students at Ashoka University
- **TECH CLUB | DPS RUBY PARK**  
I've organised workshops and contests for 80+ members with CodeChef

## LINKS

- **GitHub**/actuallysoham
- **LinkedIn**/soham-de
- **Twitter**/actuallysoham

## REFERENCES

- DEBAYAN GUPTA | Assistant Professor, Department of CS, Ashoka University
- SWAGAM DASGUPTA | CEO, *Mediacred*