AASTHA RASTOGI

aasthar3@gmail.com || LinkedIn || GitHub || Arizona, USA

EDUCATION

Masters in Computer Science

Aug 2023 - 2025

Arizona State University, Tempe, Arizona, USA

■ B.E in Computer Science Engineering – 7.63/10.0 (CGPA)

2019 - 2023

Birla Institute of Technology and Science - Pilani (BITS Pilani), Goa, India

RESEARCH EXPERIENCE

IHMI Lab, BITS Pilani, Undergraduate Thesis under Dr. Surjya Ghosh

Aug 2022 – May 2023

- Title: Developing AI-enabled Framework for Opportunistic Emotion Self-Report Collection
- Objective: To develop framework that decides probing moments for emotion self-report collection instead of continuous sampling of emotion self-reports. Delivered state-of-art ML model based on variation in physiological signals for detecting opportune self-report collection moments, technical documentation

WORK EXPERIENCE

Amazon, Software Development Engineer Intern

May 2022 – Jul 2022

- Developed script for Amazon Data Services that creates a customized dashboard showing code reviews raised to a team or group. It also mails the dashboard view to reviewers and managers
- Participated in a 2-day intra-organization hackathon. Collaborated in a diverse team of 5 to solve a pain-point and ameliorate employee experience

Microsoft Engage Mentorship Program, Mentee

Jun 2021 - Jul 2021

- Created web application where two users can enter the same room to have an audio and video call
- Used front-end and back-end web technologies, web sockets and APIs Link

Dotlas, Data Engineer

Nov 2022 - May 2023

- Working closely with the CTO to write scripts in Python, SQL to wrangle, analyze data
- Engineering, maintaining ETL pipelines and table creation and normalization

Swecha Organisation, Machine Learning Intern

Jun 2021 – Jul 2021

- Performed lane detection using center & two side lines as part of autonomous cart for agriculture
- Used the OpenCV python library for computer vision for the detection of lines

Elixar Systems, Augmented Reality Developer

Apr 2020 – May 2020

- Designed models & animations using Unity and Blender 3D modeling for Chemistry Lab experiments for Classes XI & XII
- Models use Augmented Reality to build virtual interface where students can perform experiments

PROJECTS

Title: Tic-Tac-Toe Android Application

Dec 2022

• Developed single and multiplayer tic-tac-toe game application using JAVA and Firebase - <u>Link</u>

Title: Tetris Game Engine

Mar 2022 - May 2022

- Designed a programming language to make Tetris game and its variants that runs on terminal
- Implemented the compiler and grammar for the language Link

Title: Generating Audio from given Genre

Dec 2021

- Created a variational autoencoder that generates an audio clip, given its genre
- Developed the model, trained, and tested using PyTorch and NumPy Link

Title: Impact of Skip Connections in Multilayer Perceptron

Sep 2021

• Compared the performance of a Multilayer Perceptron with skip connections to those without it

Used PyTorch to perform ablation studies & variational autoencoder as a generative model - <u>Link</u>

Title: Game Development Using Unity

May 2020 - Jun 2020

- Developed an indie game Pulse! for Developers' Society BITS-Goa Game Development website
- Worked on Unity Game Engine and C# Programming Link

Title: AR-based App Development

Jul 2020

- Participated in a 2-day hackathon to build project focused on mental health during COVID-19
- Created an AR-based app that guides the user through yoga postures Link

TEACHING EXPERIENCE

Undergraduate Teaching Assistant at BITS Pilani – Goa, CSIS Dept.

- Computer Networks (CS F303) Jan 2023 May 2023

 Assisted in conducting labs & creating questions for labs based on socket programming & networking
- Design & Analysis of Algorithms (CS F364)
 Assisted in conducting labs & creating questions for labs based on Algorithms & Dynamic Programming
- Compiler Construction (CS F363) Jan 2023 May 2023

 Assisted in conducting labs & creating questions for labs based on Flex, Bison, LLVM & Compiler Design
- Object Oriented Programming (CS F213)
 Assisted in conducting labs and creating questions for labs based on JAVA and Object-Oriented Programming designed for second-year students
- Computer Programming (CS F111)
 Mar 2022 Jul 2022, Mar 2021 Jun 2021
 Assisted in conducting labs and creating questions for labs based on BASH and C programming

POSITIONS OF RESPONSIBILITY

•	Vice-Captain, Girls' Basketball Team, BITS-Pilani, Goa	Aug 2021 – Aug 2022
•	Vice Chair, ACM BITS-Pilani Goa Chapter	Apr 2021 – Apr 2022
•	Core Member, Developers' Society, BITS-Pilani, Goa	Jan 2020 – Jun 2021
-	Secretary of Inter-School Competitions, Delhi Public School, Faridabad	2017 - 2018

VOLUNTEER EXPERIENCE

vGHC' 21 Open Source Day Mentor	Jul 2021 – Oct 2021
Chapter Lead, GirlScript Foundation	May 2021 – Nov 2021
Mentor, BITS Goa Women in Tech	Feb 2022 – Present
Mentor, Peer Mentorship Program, BITS-Pilani, Goa	Nov 2020 – Jun 2021
Mentor, Game Development Summer Technical Projects at BITS Goa	Jul 2021 – Sep 2021
VMware Campus Ambassador	Oct 2021 – Apr 2022
Alpha Microsoft Learn Student Ambassador	May 2021 – May 2022
	vGHC' 21 Open Source Day Mentor Chapter Lead, GirlScript Foundation Mentor, BITS Goa Women in Tech Mentor, Peer Mentorship Program, BITS-Pilani, Goa Mentor, Game Development Summer Technical Projects at BITS Goa VMware Campus Ambassador Alpha Microsoft Learn Student Ambassador

ACHIEVEMENTS

•	Received 100% fee waiver scholarship at DPS, Faridabad	2017 – 2018
•	Excellence for Teaching Assistantship for Computer Programming at BITS Pilani	2021 - 2022
•	Earned State 1st Rank in NSTSE Examination	2012
•	Scholar Badge and Proficiency Awardee at DPS. Faridabad	2011 – 2019

SKILLS

- **Programming Languages & Tools:** C, C++, C#, JAVA, Python, HTML, CSS, JavaScript, PHP, React.js, NumPy, Pandas, PyTorch, Keras, Scikit Learn, OpenCV, TensorFlow, Unity Game Engine, Blender, Android Studio, MySQL, Firebase, Git, Linux
- Certifications: Build Basic GANs, Basic Problem Solving, Fundamentals of Deep Learning, Network Management & Ethical Hacking, Game Development, Augmented Reality Development & ARCore, Google Cybersecurity Specialization