

Aastha Rastogi

623-217-6250 • aasthar3@gmail.com • [linkedin.com/in/aastha-rastogi/](https://www.linkedin.com/in/aastha-rastogi/) • github.com/astelrastogi • astelrastogi.github.io/

EDUCATION

Master of Science, Computer Science August 2023 – May 2025
Arizona State University, Tempe, AZ, USA
4.0/4.0 CGPA

Specialization: Cybersecurity • Teaching Assistant for Software Security (CSE545)
Bachelor of Engineering, Computer Science August 2019 – July 2023
Birla Institute of Technology and Science, Pilani, India
7.78/10.0 CGPA

TECHNICAL SKILLS

Programming Languages: Python, C/C++, Java, JavaScript, Bash, C#, PHP, Assembly, Octave

Library, Frameworks, Tools, Databases, OS: HTML, CSS, React.JS, Node.JS, Express.JS, NumPy, Pandas, PyTorch, Keras, Scikit Learn, OpenCV, TensorFlow, Unity Game Engine, Blender, Android Studio, MySQL, Firebase, Git, Linux/Unix, Wireshark, Docker, MATLAB

Certifications: Google Cybersecurity Coursera Specialization, Nettech Ethical Hacking Certification, DeepLearning.AI GANs and NLP

PROFESSIONAL EXPERIENCE

Data Engineer: Dotlas, New York, USA November 2022 – May 2023

- Acted closely with the CTO to write 25+ scrapers in **Python** and **SQL** to help retail businesses answer geographical questions
- Engineered and optimized ETL pipelines, streamlining data processing and cutting down data ingestion time by 40% for improved analytics and reporting capabilities

Software Engineer Intern: Amazon, Hyderabad, India May 2022 – July 2022

- Wrote **JavaScript** code for customizing dashboard and automating code reviews, saving 4 hours of daily manual work
- Led a 5-member cross-functional team in a high-pressure hackathon, addressing 8 employee pain-points, boosting productivity by 25%, and reducing turnover by 15%

Engage Program Mentee: Microsoft, Bangalore, India June 2021 – July 2021

- Developed web application facilitating real-time audio and video communication between two users sharing common virtual room
- Integrated front and back-end **web technologies, sockets** and **APIs** to enhance user experience, reduced page load time by 50%

Machine Learning Intern: Swecha, Hyderabad, India June 2021 – July 2021

- Performed lane detection using center and two sidelines as part of an autonomous cart for agriculture
- Incorporated the **OpenCV** Python library to detect lines in real-time video streams, resulting in 40% improvement in object tracking accuracy and reducing false positives by 50%

PROJECTS

Tic Tac Toe Android App, Class Project December 2022

- Developed single and multiplayer Tic-Tac-Toe game application deployed in **Java** and **Firebase** - [Link](#)

Tetris Game Engine, Class Project March 2022

- Engineered a specialized programming language for building Tetris game on a terminal interface
- Executed **Lex** and **Yacc** to construct compiler and grammar, facilitating efficient and intuitive game development - [Link](#)

Game Development using Unity, Personal Project July 2020

- Created indie game Pulse! for BITS' Developers' Society, leading to a 200% surge in website traffic and 15% higher user engagement
- Deployed innovative gameplay features leveraging Unity Game Engine and C# programming, resulting in a substantial 40% boost in player engagement and a commendable 25% rise in in-app purchases.- [Link](#)

Augmented Reality Yoga App, Hackathon Project June 2020

- Led a 3-member team in a 2-day **hackathon** to build an **AR-based** app that guides users through yoga postures - [Link](#)
- Around 20+ people downloaded and used the apps to deal with mental health issues

ACADEMIC EXPERIENCE

Undergraduate Thesis at IHMI Lab: Birla Institute of Technology and Science - Pilani, Goa, India August 2022 – May 2023

- Delivered state-of-art **machine learning model** with an accuracy of 70 percent, based on variation in physiological signals for detecting opportune self-report collection moments, technical documentation

Undergraduate Teaching Assistant: Birla Institute of Technology and Science - Pilani, Goa, India March 2021 – May 2023

- Collaborated with teachers for courses of Computer Programming (**CS F111**), Object-Oriented Programming (**CS F213**), Compiler Construction (**CS F363**), Computer Networks (**CS F303**), Design and Analysis of Algorithms (**CS F364**)
- Conducted labs and tutorials by devising lab questions, clearing doubts of 250+ undergraduate students

VOLUNTEER/EXTRACURRICULAR EXPERIENCE

Vice-Captain, Basketball Team, Birla Institute of Technology and Science - Pilani, Goa, India August 2021 – March 2023

- Spearheaded the team to 10+ inter-college sports tournaments and a bronze medal in Spree'23 annual sports fest

vGHC'21 Open-Source Day Mentor, CircuitVerse July 2021 – October 2021

- Mentored and facilitated contributions from 15+ participants to CircuitVerse open-source issues on GitHub