

## EDUCATION

**Georgetown University**, Washington D.C., U.S.A.  
*M.S. Computer Science*

August 2023 – Expected May 2025

**Bennett University**, Uttar Pradesh, India  
*B. Tech Computer Science Engineering* — CGPA: 8.59 on 10.00 scale

July 2019 – June 2023

## WORK EXPERIENCE

**Georgia Institute of Technology**, Atlanta, Georgia, U.S.A. (Remote)  
*Research Intern*

Jan 2023 – May 2023

- Conducted research to evaluate the effectiveness of Particle Swarm Optimization (PSO) as a task-scheduling algorithm to manage large-scale computational problems.
- The performance of PSO has been compared to other scheduling methods, including First-Come-First-Serve (FCFS), Shortest Job First (SJF), and Round Robin (RR).
- Simulated and created a dataset of 1491 entries using Cloudsim, an open-source cloud environment simulator. Analyzed data trends using Python libraries to validate initial hypotheses.
- Performed simulations with different machine types, High Performance (HP) and Low Performance (LP), in two real-world scenarios: Short Operation (SO) and Long Operation (LO).
- Investigated FCFS, SJF, RR, and PSO performance with LPLO, HPLO, HPSO, and LPSO operations.
- Awarded with Certificate for successful completion of the internship under my mentor Dr. Vijay Madiseti.

**Bennett University**, Uttar Pradesh, India  
*Coordinator of Teaching Assistants (Coordinator TA)*

Jan 2023 – May 2023

- Coordinated and supervised a team of teaching assistants for the Java course offered to 1st Year students.
- Taught Java programming language to 1st year students through laboratory sessions and tutorials, helping them develop a strong foundation in programming concepts.
- Evaluated students' projects to assess their understanding of the subject matter and provided feedback to help them improve their work.
- Mentored other teaching assistants who were responsible for teaching other electives courses (Web Technologies, Blockchain), providing guidance and support in their teaching roles.
- Demonstrated strong organizational and communication skills, ensuring that teaching assistants were properly trained, schedules were maintained, and course materials were updated and available to students.
- Awarded Teaching Feedback of 4.78 on a scale of 5.00
- Honored with Appreciation Letter from Dean of School of Computer Science Engineering and Technology.

**Bennett University**, Uttar Pradesh, India  
*International Office Intern*

Apr 2023 – Apr 2023

- Facilitated cultural and foreign exchange in the university. This included workshops, international university education fairs, aimed at fostering cross-cultural understanding, and higher education opportunities.
- Documented the visits of international delegates through photography, article writing, and social media post captions. This included taking professional photographs and notes during official events, campus tours, interaction of delegates with about 6000 students, and high-level meetings.
- Coordinated events for 6 top and leading universities and organizations: EducationUSA-USIEF, Cambridge University, Georgia Tech, University of Rochester, University of Essex, and Arizona State University.
- Awarded Letter of Appreciation from Dean of International Relations and Corporate Outreach.

**Bennett University**, Uttar Pradesh, India  
*Teaching Assistant (TA)*

Oct 2022 – Dec 2022

- Responsible for conducting lab sessions and tutorials for first-year students about Python programming.
- Provided guidance and support to students during their projects and assignments by scheduling Special Lab and Doubt Clearing Sessions for students.
- Evaluated students' projects and provided constructive feedback to help them improve their skills.
- Demonstrated effective teaching techniques to promote students' understanding of programming concepts.
- Organized and led review sessions before exams to help students prepare and perform well in assessments.
- Honored Letter of Appreciation from Dean of School of Computer Science Engineering and Technology.

**National Informatics Centre**, New Delhi, India  
*Full Stack Java Developer Intern*

June 2022 – Aug 2022

- Orchestrated the development of two comprehensive full stack reports under the ePanchayat Mission Mode Project of the Ministry of Panchayati Raj, contributing to the Panchayat Development Plan.
- Innovated the Prayas Dashboard Report and Self-Help Groups (SHG) Presentation Report, providing critical insights and data visualization for policy-making.
- Engineered user-centric and interactive front-end interfaces utilizing AngularJS, jQuery, and Bootstrap, enhancing user experience and engagement.
- Constructed a robust back-end system with Java and Spring, facilitating rapid and efficient data processing, thereby increasing operational efficiency.
- Managed and maintained a PostgreSQL database, ensuring data integrity and availability.
- Awarded with a Certificate for successfully completing the internship from Scientist-E at NIC.

## PROJECTS

### CSE-2019

Feb 2022 – June 2023

- Designed UI and developed a responsive website for the whole batch of 2023, featuring Academic Links, Links to various Government of India websites, academic documents, events, deadlines, and official holidays.
- Implemented advanced search features for cloud-hosted documents and important events and has been hosted over cloud platforms, Netlify and Microsoft Azure.
- Efficiently served over 400 students, providing them with a user-friendly interface and valuable educational resources. Received exceptional feedback from students, praising the website's effectiveness and ease of use.
- Implemented improvements and updates based on user feedback to enhance the user experience.
- Awarded Appreciation Letter from Dean of School of Computer Science Engineering and Technology.

### CRICEX

Aug 2021 – Sept 2021

- Innovated a command line-based user interface which extracts the relevant highlights from a cricket match using various Computer Vision Techniques and OCR Technologies.
- Employed image reading/displaying, Image Cropping through Region of Interest extraction, Image Down-scaling, OCR, and frame extraction, to manipulate and extract information from images or video frames.
- Integrated a Video Writing script which creates a new video file and writes the selected frames to the output video file.
- This tool filters out all the non-relevant stuff thus reducing the overall video time up to 35%.
- Awarded as International Finalist (Top 8) in HCL-Cricket Australia powered by Microsoft, TechJam 2021 Hackathon amongst more than 8000 participants globally.
- Panelists: Brett Moorgas, HCL Vice President, Sebastián Lancestremère, Microsoft Sports Director and George Bailey, Captain of Australian Cricket Team.

- Created a web user-interface that automatically informs the proctor about an unfair means via email by detecting sound and eye movement of the student. Eagle AI is very easy to use.
- Various JS libraries were used in the implementation of the solution. One of the library used is WebGazer that helps in eye tracking on various browser that made the work of tracking eyes very easy and platform independent.
- Integrated the Speech Recognition API for javascript, that helped in converting the audio coming from the candidate into text and helped in finding if the candidate was found talking to someone else.
- Integrated the SMTP.js library that helped in sending the email from the system to the proctor about the status of the candidate and inform the proctor if the candidate was found cheating.
- Awarded as National Finalist (Top 15) in IEEE //Doubleslash 2021 Hackathon.

## RELEVANT SKILLS

**LANGUAGES:** Java — Python — C++ — HTML — CSS — JavaScript

**FRAMEWORKS:** Bootstrap — AngularJS — jQuery — Selenium — Tailwind CSS

**TECHNICAL SKILLS:** Git — Web Development — AWS — Linux — Android Development

**OTHER SKILLS:** Leadership — Team-Player — Problem Solving — Interpersonal Skills — Organizational Skills

## AWARDS AND ACHIEVEMENTS

**HACKATHONS:** Microsoft HCL - Cricket Australia TechJam 2021 Finalist — IEEE Doubleslash 2021 Finalist

**ACADEMICS:** Coordinator TA — Teaching Assistant — Class Representative — Technical Co-Head

**CERTIFICATIONS:** Microsoft AZ 900 — Microsoft AI 900 — 30 Days of Google Cloud Program

**MOOCS:** Duke University — University of Michigan — University of California, Irvine — IBM Developer—Google

## EXTRA-CURRICULAR ACTIVITIES

- Awarded Letter of Appreciation from Dean of the School of Computer Science Engineering and Technology, Dr. Deepak Garg, in September 2022, for creating and hosting a website with a cloud-based backend for the CSE Students of Batch 2019–2023, which more than 400 students extensively use.
- Honored Appreciation Letter from Dean of the School of Computer Science Engineering and Technology, Dr. Deepak Garg, for serving as Class Representative of CSE 2019, 400+ students (since Aug 2019).
- Rewarded Appreciation Letter from Professor Dr. Shivani Goel for serving as Class Representative of ECSE379L C++ elective course (200+ students) during my tenure Aug 2021 – Dec 2021.
- Commended with a Letter of Appreciation from the Dean of Student Affairs, Dr. Vinod Vasant Shastri, for leading a team of 30+ as Technical Co-Head at CSI Bennett University during my tenure from Sept 2020 – Sept 2021 and organizing various events.
- Participated in “The Collaborative 2021 Global Student Challenge” conducted by Babson College, Wellesley, Massachusetts, U.S.A., held on 31st March 2021 and pitched the idea of “Shop2Earn”.
- Published in the Bennett University Research Society Journals 3 articles related to Cloud Computing as a Core Member at CSI Research Society during my tenure Oct 2020 – Sept 2021.

## VOLUNTEER EXPERIENCE

- Involved in a crowdfunding campaign, “Oxygen Relief”, to support the nation during the tough times of COVID-19, raised funds worth Rs.27,000 (about \$320.00) through crowdfunding, and donated to Hemkunt Foundations, India during May 2021.
- Donated Blood (AB+) at a Blood Donation Camp organized by Alexis Club Bennett University in collaboration with Lions Blood Bank India on 17th October 2019.