Sastha Srinivasan

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I am Shyama Sastha Krishnamoorthy Srinivasan, a Ph.D. Candidate from the department of CSE @ IIIT-Delhi, co-advised by Prof. Pushpendra Singh (IIIT-Delhi) & Prof. Mohan Kumar (RIT, NY, USA). My research combines AI/ML, sensing, ubiquitous computing, and HCI to design context-sensitive technologies for proactive health and wellbeing. Through my research, I aim to bridge the gap between algorithmic innovation and real-world care practices.

Education

2022 – **Ph.D., Computer Science Engineering**
Indraprastha Institute of Information Technology, Delhi (IIIT-Delhi)
Advisors: Prof. Pushpendra Singh (IIIT-Delhi), Prof. Mohan Kumar (RIT, NY, US)
PhD Dissertation Title: *Sangati: A HCAI-based Framework for Collective Care*

2017 – 2019 **M.S., Computer Systems Engineering, IoT**
Northeastern University
Advisor: Prof. Peter O'Reilly
Masters Project: *Indoor Air Quality Monitoring System*

2012 – 2016 **B.Tech, Electronics and Instrumentation Engineering**
SASTRA University
Bachelors Thesis: *Low-cost Oil Quality Sensor Development*

Experience

Jan 2022 – **PhD Candidate**, IIIT-Delhi
Researching towards designing, developing, and deploying a system to support collective care with work on feasibility pilots and modeling interactions for better AI/LLM alignment.

Jan 2022 – Dec 2025 **Teaching Assistanship (TA) Across Courses**, IIIT-Delhi
Assisting the faculty on teaching, management, evaluation, and other course-related activities across various Computer Science courses offered at IIIT-Delhi.
Courses: CSE232, Computer Networks (Head TA) | CSE583, Software Development Using Open Source (Head TA) | CSE530, Distributed Systems Concepts and Design (Head TA) | CSE101, Introduction to Programming (Head TA + Personal TA for students with special needs) | CSE222, Analysis and Design of Algorithms (TA)

Apr – Dec 2021 **Lead Programmer Analyst**, Unanu
Built and deployed a data pipeline, dataflow, and Power BI dashboard for Daimler ASIA's Engine Subassembly, displaying logistics, shortage, storage, and production metrics.

Dec 2019 – Dec 2021 **Programmer Analyst**, Sara's Inc
Designed, developed, and deployed multi-task, multi-class classification consumer-facing APIs using the GCP API framework. Created usage dashboards for the user portal managers that help with traffic monitoring and smart resource management.

Jan – June 2019 **Product Security Engineer Co-op**, Bose Corporation
Mentors: Nathan Holstein and Aldo Cassola
Developed an automated test suite for the CI/CD pipeline to identify and eliminate vulnerabilities in home entertainment smart sound systems. Designed a proactive analysis feature using adaptive learning to detect network weaknesses and secured code fixes by evaluating timing attack vulnerabilities, reducing recall costs.

May – June 2017 **Academic Author - Digital Media**, Ansrsource India Pvt. Ltd.
Designed, developed, and deployed e-learning content for IIMB, McGraw-Hill, Pearson, Fortuna Pix, Cengage, and ASU. Built a content-workflow framework that outperformed an automated system by 100% while eliminating errors. Created e-books and adaptive PDFs for various clients using Adobe tools and proprietary web frameworks.

Ongoing Work

Nov 2025 – **A Demonstration of the Collective Care framework- HCAI Research Study:**
Ongoing study to validate the Collective Care framework through a pilot deployment supporting care realities in India. The results and findings are targeted for IMWUT (Ubicomp '26).

Nov 2025 – **Modelling Collective Care - ML Modelling**
Developing a finetuned open-source LLM to support the collective care context in contextualization, routing, provenance, and verification. Targeted for ICML '26.

May – Nov 2025 **JEEVHITAA (A HCAI System to support Collective Care) - HCAI System Design**
An end-to-end HCAI system for operationalizing collective care supporting shared responsibility, trust, and engagement. The end-to-end system design and development submitted to ACM MobiSys '26.

May – Sep 2025 **The Collective Care framework - HCI Research Study**
Developed an HCAI-based Collective Care framework to guide technology design for Global South contexts like India. Under review at CHI '26.

Publications

Refereed Conference Proceedings

[C1] **Shyama Sastha Krishnamoorthy Srinivasan**, Mohan Kumar, and Pushpendra Singh. 2025. Leveraging Familiarity with Television to Enrich Older Adults' Engagement and Wellbeing: A Feasibility Study Using Video Probes. Proc. ACM Hum.-Comput. Interact. 9, 7, Article CSCW443 (November 2025), 27 pages. DOI: 10.1145/3757624.

[C2] **Shyama Sastha Krishnamoorthy Srinivasan**, Arhaan Bahadur, Suruchi Singh, Swati Kedia gupta, Vanya Jain, Koushik Sinha Deb, Mohan Kumar, and Pushpendra Singh. 2025. Demystifying Mental Health Reports Through an LLM-based Approach. In Proceedings of the Extended Abstracts of the CHI Conference on Human Factors in Computing Systems (CHI EA '25). Association for Computing Machinery, New York, NY, USA, Article 174, 1–7. DOI: 10.1145/3706599.3720208.

[C3] **Shyama Sastha Krishnamoorthy Srinivasan**, Siddharth Singh, Pushpendra Singh, and Mohan Kumar. 2024. BLIPS: Bluetooth locator for an Indoor Positioning System in Realtime. In Proceedings of the 7th ACM SIGCAS/SIGCHI Conference on Computing and Sustainable Societies (COMPASS '24). Association for Computing Machinery, New York, NY, USA, 18–29. DOI: 10.1145/3674829.3675057.

[C4] **Shyama Sastha Krishnamoorthy Srinivasan**, Avi Gupta, and Pankaj Jalote. 2024. An Experience Report on Teaching a Large Introductory Programming Course in Hybrid Mode. In Proceedings of the 55th ACM Technical Symposium on Computer Science Education V. 2 (SIGCSE 2024). Association for Computing Machinery, New York, NY, USA, 1704–1705. DOI: 10.1145/3626253.3635486.

Under Review Submissions

[U1] **Shyama Sastha Krishnamoorthy Srinivasan**, Mohan Kumar, and Pushpendra Singh. Unpacking Personal(?!) Health Informatics for Proactive Collective Care in India. arXiv preprint arXiv:2509.01231 (2025). DOI: 10.48550/arXiv.2509.01231

Awards & Recognitions

2025 *IIIT-Delhi Top-tier Conference Allowance, USD* $1,000$

2024 *DST Chanakya Fellowship, INR* $510,000$

2024 *MLSS 2024 Travel Bursary, JPY* $100,000$

2022 *ACM SIGCHI Travel Grant, INR* $20,000$

Service

Reviewing

PACM CHI (2023, 2024 2025*)
PACM HCI (2024*, 2025)
PACM IMWUT (2024)
PMC (2025*)
TEI (2024, 2025, 2026), DIS (2024), IMX (2024), C&C (2024, 2025), SIGCSE TS (2024), SIGCSE TS Virtual (2024), ITiCSE (2024, 2025)
**Special Recognitions for Outstanding Reviews*

Organizing

- Associate Chair - TEI WiP (2026)
- Associate Chair - C&C (2025)
- Associate Chair - SIGCSE TS Virtual (2026)
- Associate Chair - ITiCSE (2024, 2025)
- Assistant to General Co-Chairs - COMPASS (2024)

Mentoring

- **Masters Student(s):**
  - **IIIT-Delhi:** Harsh Pala
- **Undergraduate Student(s):**
  - **IIIT-Delhi:** Arhaan Bahadur, Vanya Jain, Siddharth Singh, Krishmeet Singh, Shreya Pandey

Miscellaneous

Skills & Interests	Human-Computer Interaction, Ubiquitous Computing, Care Technologies, Collaborative-AI, Social Computing, Context-Aware Technologies, Computational Social Science, Behavioral Analysis, Machine Learning, Statistical Modeling, Mental Wellbeing, Field Studies
Tools & Programs	Python, PyTorch, huggingface, R, Django, Flask, MySQL, MongoDB, Java, C, C++, Android, JS
Languages	English, Tamil, Hindi (basic), Sanskrit (basic), Japanese (basic), German (basic)