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Education

PhD Candidate, Interdisciplinary Design and Media, CAMD, Northeastern University, Boston,
 MA

2021-Present

- Dissertation: Using Data to Empower Asynchronous Communities in Game-Based Learning
- o Advisor: Dr. Casper Harteveld
- Master of Science in Game Science and Design, Northeastern University, Boston, MA 2016–2018
 - o Thesis: "Pokémon Go and Social Anxiety: A Therapeutic Platform"
- Bachelor of Technology in Computer Science, JSS Academy of Technical Education, UPTU,
 Noida, India

2010-2014

Research Interests

- Game-based learning and educational technology
- Data visualization for asynchronous communities
- Human-computer interaction and user experience in games
- Citizen science and participatory design

Research Experience

• PhD Candidate, Northeastern University

2021-Present

- Dissertation research on systems for connecting members of Game-Based Learning Asynchronous Communities (GBLAC) through data visualization.
- Employing Research through Design methodology to create and evaluate artifacts.
- o Investigating data-driven community engagement in entertainment games.
- Senior Research Assistant, NU Game Studio, Northeastern University 2018–2021
 - Led game development and primary research for educational gaming titles, including Geoexplorer, Studycrafter, and XERT.
 - Conducted user experience research, usability testing, and iterative design based on user feedback.
 - Mentored and trained new team members.
- Research Assistant, Northeastern University

2017-2018

Game Programmer for Foldit, a citizen science protein folding game.

Developed tutorial levels and UI features; conducted usability studies to inform design.

Publications

- Narayan, U. (2018). Pokémon Go and Social Anxiety: A Therapeutic Platform (Master's thesis, Northeastern University). PDF link
- Miller, J. A., Narayan, U., Hantsbarger, M., Cooper, S., & El-Nasr, M. S. (2019, August). Expertise and engagement: re-designing citizen science games with players' minds in mind. In *Proceedings of the 14th international conference on the foundations of digital games* (pp. 1-11). https://dl.acm.org/doi/abs/10.1145/3337722.3337735
- Tochilnikova, E., Patnaik, A., Alsebayel, G., Narayan, U., Coeytaux, A., Ramdin, V., ... & Harteveld, C. (2022, April). "guilty of talking too much": How psychotherapists gamify therapy. In *Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems* (pp. 1-17). https://dl.acm.org/doi/abs/10.1145/3491102.3517437
- Ulusan, A., Narayan, U., Snodgrass, S., Ergun, O., & Harteveld, C. (2022, March). "Rather Solve the Problem from Scratch": Gamesploring Human-Machine Collaboration for Optimizing the Debris Collection Problem. In *Proceedings of the 27th International Conference on Intelligent User Interfaces* (pp. 604-619). https://dl.acm.org/doi/abs/10.1145/3337722.3337735
- Issak, A., **Narayan, U.**, Srinivasan, R., Kleinman, E., & Harteveld, C. (2025, June). Kaleidoscope Gallery: Exploring Ethics and Generative Al Through Art. In *Proceedings of the 2025 Conference on Creativity and Cognition* (pp. 949-963).
- Nasri, M., Narayan, U., Sonbudak, M. F., Simonson, A., Chiu, M., Donati, J., ... & Harteveld, C. (2024, October). Designing a Virtual Reality Training Apprenticeship for Cold Spray Advanced Manufacturing. In 2024 IEEE International Symposium on Mixed and Augmented Reality Adjunct (ISMAR-Adjunct) (pp. 541-544). IEEE. https://ieeexplore.ieee.org/document/10765352

Technical Skills

- Programming: C, C++, C#, Python, Java, JavaScript, Nodejs, HTML, CSS
- Game Engines: Unity, Unreal Engine
- Data Analysis: SQL, R, Python, Qualtrics, Excel, Qualitative
- Design: Human-Centered UX Design, Game Design, Level Design, Narrative Design

Professional Experience

- QA Tester, Mutazione (NEU)
 - 2018
 - Quality assurance and narrative testing; debugging SVG parser system in Unity C#.
- Back-End Developer, Art + Design Research, Northeastern University 2017
 - Developed backend framework for Storylab base website using JavaScript and Node.js.
- Software Engineering Intern, Centre for Development of Advanced Computing (CDAC), Noida
 2013
 - Led development of a web-based reimbursement system using Jakarta Struts.

Service and Leadership

- Mentored and trained new and senior team members at NU Game Studio.
- Led onboarding and skill development workshops.