Suvrangshu Barua

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○ SuvrangshuBarua 🔗 Website

⚛ Research Interest

AR/VR/XR, Serious Games, Human-Computer Interaction, Societal aspect in Game Design, Game Design in general, IoT, Robotics

💼 Employment

University of Gothenburg   08/2025 – Present
Teaching Assistant

Chalmers University of Technology   01/2025 – 03/2025
Teaching Assistant ⤢   Gothenburg, Sweden

Big Bang Studio Ltd   12/2023 – 09/2024
Senior Game Developer ⤢   Dhaka, Bangladesh

Kolpoverse Studios   12/2022 – 11/2023
Game Developer   Dhaka, Bangladesh

Alpha Potato Ltd   01/2020 – 11/2022
Game Programmer & Designer   Dhaka, Bangladesh

🎓 Education

Master's in Game Design and Technology   09/2024 – present
University of Gothenburg ⤢   Gothenburg, Sweden

Bachelor's in Computer Science and Engineering   04/2015 – 03/2019
Khulna University of Engineering and Technology ⤢   Bangladesh

📖 Peer Reviewed Publication

Barua, S., & Pagliarani, M. (2025). *Have you ever experienced someone else's breakup in first person?* In **Proceedings of the 19th European Conference on Game-Based Learning (ECGBL 2025)** (Vol. 2, pp. 948-956). https://doi.org/10.34190/ecgbl.19.2.3946 ⤢

Barua A, Islam T, Alam A, <u>Barua S</u>. *IoT Controlled Six Degree Freedom Robotic Arm Model for Repetitive Task*, In **2021 International Conference on Big Data, IoT, and Machine Learning**. Lecture Notes on Data Engineering and Communications Technologies, vol 95. Springer. https://doi.org/10.1007/978-981-16-6636-0_32 ⤢

✐ Teaching Experience

Teaching Assistant (DAT232 / DIT285 Advanced Requirements Engineering)   08/2025 – Present
University of Gothenburg   Gothenburg, Sweden
- Supervising four student groups in writing requirements document and
  experience report in software engineering.
- Assisting examiner with grading the reports and checking health of the
  teams.

Teaching Assistant (DAT510 / DIT414 Design and Construction of Digital   01/2024 – 03/2024
Games)   Gothenburg, Sweden
Chalmers University of Technology
- **Supervised** student groups on **Unity-based** game development projects.
- Mentored and guided students on **OOP structure** in *C#* and effective use
  of source control (Git) in their projects.

Mentor   04/2023 – 06/2023
Kolpoverse Studios   Dhaka, Bangladesh
- Coached a probationary developer on code standardisation and product
  deployment protocols

Mentor   05/2021 – 11/2021
Alpha Potato Ltd   Dhaka, Bangladesh
- Mentored an intern on OOP best practices and supervised a junior
  developer on game optimisation.

⚛ Professional Experience

Senior Game Developer   12/2023 – 09/2024
Big Bang Studio Ltd   Dhaka, Bangladesh
- Successfully shipped **four hybrid casual games** (two of them passed **soft
  launch**), achieving an average **D1 retention** rate of over **35%**, **CPI <$1** on
  average and an average **playtime** exceeding 2500 seconds.
- **Led** a team of 3 developers, reducing prototype delivery timelines by
  20% through **Agile** workflow and **sprint management**.
- Developed **playable ads** with 15% higher CTR than industry benchmarks,
  boosting **ROI** by 30%.

Game Developer   12/2022 – 11/2023
Kolpoverse Studios   Dhaka, Bangladesh
- Created a **prototype template** ⬀ , cutting repetitive tasks by 50%, saving
  30+ hrs/month and accelerating prototyping by 40%.
- Executed R&D tasks using **spatial partitioning** in **mesh deformation**, **A***
  pathfinding in AI systems and **ml-agents** to use **Machine Learning** models
  in games.
- Produced visually pleasing effects per requirement using **Shader Graph**,
  compute shader to enhance gameplay aesthetic and parallelisation.

Game Programmer & Designer   01/2020 – 11/2022
Alpha Potato Ltd   Dhaka, Bangladesh
- Contributed as **gameplay programmer** & **level designer** to 2 top-5 chart
  hits (Prank Master 3D ⬀ and Pawn Shop Master ⬀), driving **100 Million+**
  combined downloads and 4.3/5 average ratings.

- Implemented A/B testing for monetisation features, increasing **IAP** operation by 18% and **ad revenue** by 27%.
- Rapidly prototyped 25+ hypercasual concepts, two adopting into soft launch, achieving 750k+ total downloads.

⌂ Organisations

GameDev Gothenburg ⎋   05/2025 - present
Board Member
We are a loose community of game developers, artists, students, researchers and enthusiasts centered around the Gothenburg area. We sometimes gather for after works, host knowledge and experience sharing sessions or organize game jams and events.

Game Development Club of KUET   2018 - 2019
Founding President
A club dedicated to supporting game developers in the Khulna division, providing guidance and building a niche community to foster game development practice in Bangladesh.

CYBORG - Cyber Gaming Club of KUET ⎋   2017 - 2019
Vice President
Fulfilled my responsibilities as a vice president, supported the members, and organised numerous events with the university premises and the city division.

🧠 Skills

Languages — C#, Python, C/C++, JavaScript/TypeScript, HTML/CSS, LaTeX, Dart

Frameworks/API — OpenGL, Vulkan, PixiJS, Firebase, Anaconda, PyTorch, Selenium

Game Engines: — Unity Engine, Unreal Engine, Godot, Proprietary Engine

Development Skills — Performance Optimisation, VR Tech, Multiplayer Systems. Procedural Generation, AI Behaviour Implementation, Shader Programming, Version Control with Git, Level Design, Game Engine Architecture, Raytracer/Pathtracer, Custom Engine Development, Automation, Web-Scrapping

⛓ References

Pauline Belford, *Lecturer, Interaction Design,* University of Gothenburg
pauline.belford@gu.se

Natasha Bianca Mangan, *Teacher, Interaction Design,* University of Gothenburg
natasha.bianca.mangan@gu.se