

Ayaskant Panigrahi

I want to create seamless interactions between humans and computers through innovative work in 3D and Extended Reality User Interfaces

Website DevPika.github.io

LinkedIn linkedin.com/in/ayaskant-panigrahi

Email ayaskant_panigrahi@sfu.ca

Tel. (+1) 778-322-3014

Education

Year	Qualification	Institute	GPA/%
2023 (expected)	MSc. in Interactive Arts and Technology	Simon Fraser University, BC, Canada	4.13 / 4.33 (Fall '22)
2020	BTech. in Computer Science and Engineering	Indian Institute of Information Technology, Design and Manufacturing, Jabalpur (IIITDMJ)	8.6/10 CPI

Work experience

- Huawei Technologies** (*CloudCG team, Part-time, May – Oct 2022*) **Support Researcher**
Worked on various C++ and Python plugins centered around FBX/gLTF for Unreal Engine, O3DE and Blender
- IAT 312: Foundations of Game Design** (*SFU, Jan – Apr 2022*) **Graduate Teaching Assistant**
Guided undergraduate students in analyzing & designing video/board games by leading workshop sessions.
- IAT 410: Advanced Game Design** (*SFU, Sep – Dec 2021*) **Graduate Teaching Assistant**
Supported final year undergraduate students in designing and developing polished games based on industry practices using game engines like Unity, which were judged by a panel of experts at the end of the course.

Research experience

- VVISE Lab, Simon Fraser University** **Themes:** VR/AR | Interaction Design | Unity3D
Jan 2021, ongoing
Research on 3D interaction techniques in Virtual and Augmented Reality under the supervision of Prof. Wolfgang Stuerzlinger, School of Interactive Arts and Technology (SIAT).
- Embedded Interaction Lab, IIT Guwahati** **Themes:** VR interaction | Unity3D | Leap Motion
May – Nov 2019
Six-month research internship under Dr. Keyur Sorathia's supervision. Evaluated VR gesture-based selection techniques, also worked on a bespoke hand-held controller to improve accessibility of virtual environments
- OzCHI 24-hr Student Design/Research Challenge** **Themes:** AR interaction | Service Design
Aug 2019
Team specially mentioned as being among the top five from all participating teams worldwide. Designed a smart city service for community resilience during adverse conditions like floods in Mumbai

Publications

- Shimmila Bhowmick, **Ayaskant Panigrahi**, Pranjal Borah, Pratul Kalita, and Keyur Sorathia. 2020. Investigating the Effectiveness of Locked Dwell Time-based Point and Tap Gesture for Selection of Nail-sized Objects in Dense Virtual Environment. *In Symposium on Spatial User Interaction (ACM SUI '20)*. Article 26, 1–2. DOI: <https://doi.org/10.1145/3385959.3422701>
- Pranjal Protim Borah, **Ayaskant Panigrahi**, and Keyur Sorathia. 2020. TMOVE: Multimodal Feedback Actuator for Non-visual Exploration of Virtual Lines. *In Proceedings of the Fourteenth International Conference on Tangible, Embedded, and Embodied Interaction (ACM TEI '20)*. 603–610. DOI: <https://doi.org/10.1145/3374920.3374994>

Test Scores

- GRE General Test:** 332/340 (Quantitative – 168, Verbal – 164, Analytical Writing – 4)
- TOEFL:** 108/120 (Reading – 28, Listening – 30, Speaking – 23, Writing – 27)

Leadership Roles and Volunteering

- Contributions to **open-source** libraries like **three.js** and **Unity Experiments Framework (UXF)**
- Member of Vancouver's **VanVR Meetup group**, regular participant in events like meetups and hackathons
- Acted as leading member of **IIITDMJ Game Development group**
- Part of 4-member **Project Steering group** leading development of **IIITDMJ ERP software** (Fusion)
- **Student volunteer** for SIGCHI-sponsored "**Expanding the horizons of HCAI**" summer school in New Delhi
- Core volunteer in **organising IIITDMJ Dribbble meet**

Skills

- Languages & Tools: **C#** – Unity, **Javascript** – three.js, PlayCanvas, p5js, **C++** – O3DE, Unreal Engine
- Platforms: **VR/AR/XR** – PC, Standalone and WebXR, Raspberry Pi, Arduino

Major Projects

- **DAW [n] XR – entry in Steampunk Digital VR challenge** (2022) **Skills:** AR/VR | WebXR | Javascript
Developed a hand-controlled interactive music synthesizer for Meta Quest 2 using WebXR and PlayCanvas
- **Creative Doodles with p5js** (2021 / 22) **Skills:** Creative Coding | Javascript
Designed a series of creative sketches using p5js & participated in weekly challenges on official p5js Discord
- **Memento Flori – Imagining Virtual Funerals** (2021) **Skills:** VR UX Speculative Design | Javascript
Designed and programmed interactions for a speculative design project on Virtual Funerals of the future, involving scripting with Javascript on the Tivoli Cloud VR platform
- **Fusion – Institute ERP Software** (2019) **Skills:** Django | Git VCS | Software Engg.
Led the development of ERP software, managing contributions using a Forking Git workflow
- **JIGREE – Improving Jabalpur tourism sector** (2018) **Skills:** Service Design | Arduino
Intervenes at all steps in tourists' journey by providing a central Android app during their stay in Jabalpur
- **Pandemonium** (2017) **Skills:** Game Development
Participated in and won a 72-hr institute wide gamejam based on the theme "Steampunk"

Relevant coursework

- **Design Approaches to Computing** (Fall '21, SIAT, SFU)
- **Creative Programming for Digital Media & Mobile Apps** (University of London, online via Coursera)
- **3D Interaction Design in Virtual Reality** (University of London, online via Coursera)
- **Human-Centered Design: An Introduction** (UCSD, online via Coursera)
- **Computer Vision with Deep Learning** (Spring '20, IIITDMJ)

Awards and Achievements

- **FCAT Graduate Fellowship** valued at **3500 CAD**, SIAT, SFU **2022**
- **Entrance Graduate Fellowship** valued at **7000 CAD**, SIAT, SFU **2021**
- **IIITDMJ Proficiency Prize** for the **best project** in the graduating batch **2020**
- **Institute topper** in **NCAT 2019** First round with a **nationwide percentile of 99.2** **2019**
- **Runner up team** in Hackathon by Vassar Labs for **enabling discovery of offbeat places** through app **2017**
- Selected for the **prestigious Kishore Vaigyanik Protsahan Yojana (KVPY) Fellowship** **2015**
- Awarded **Scholarship** under **National Talent Search (NTS) Scheme** **2012 - 2020**