

# Ayaskant Panigrahi

*I want to create seamless interactions between humans and computers through impactful research in 3D, Natural and Tangible User Interfaces*

Email [ayaskant\\_panigrahi@sfu.ca](mailto:ayaskant_panigrahi@sfu.ca)  
Tel. (+91) 89890 34362  
Website [DevPika.github.io](https://github.com/DevPika)  
LinkedIn [linkedin.com/in/ayaskant-panigrahi](https://www.linkedin.com/in/ayaskant-panigrahi)

## Education

Year	Qualification	Institute	GPA/%
2022 (expected)	MSc. in Interactive Arts and Technology	Simon Fraser University, BC, Canada	4.22 (Term 1)
2020	B. Tech. in Computer Science and Engineering	Indian Institute of Information Technology, Design and Manufacturing, Jabalpur (IIITDMJ)	8.6/10 CPI
2016	Class XII Telangana Board	Vidyadham Junior College (FIITJEE), Hyderabad	96.8%

## Research experience

- VVISE Lab, Simon Fraser University** **Themes:** VR interaction design | Unity3D  
*Jan 2021, ongoing*  
Research on 3D interaction techniques in VR under the supervision of Prof. Wolfgang Stuerzlinger, School of Interactive Arts and Technology (SIAT).
- IVE Lab, IIITDM Jabalpur** **Theme:** Deep learning based Image Segmentation  
*Jan – Sep 2020*  
Research on automatic smoke segmentation using deep learning methods under the guidance of Dr. Pritee Khanna, Dept. of Computer Science and Engg.
- Embedded Interaction Lab, IIT Guwahati** **Themes:** VR interaction design | Unity3D | Leap Motion  
*May – Nov 2019*  
Six-month research internship under Dr. Keyur Sorathia's guidance. Developed Unity3D application (with C# scripting) to prototype and test various free hand gesture-based selection techniques in Immersive Virtual Environments. Also worked on a bespoke hand-held controller for non-visual exploration of virtual space.
- OzCHI 24-hr Student Design/Research Challenge** **Themes:** AR based 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)

## Skills

- Languages & Tools:** Unity, C#, Java, Eclipse and Processing IDE, Adobe Illustrator and Photoshop
- Platforms:** VR, Desktop, Android, Raspberry Pi, Arduino

## Major Projects

- **Redactio.ml – Automatic personal info redaction** **Skills:** Python | IBM Watson | Flask  
*Mar 2019*  
Created a webapp to anonymize data by detecting personal info in user data, with option to redact them
- **Fusion – Institute ERP Software** **Skills:** Django | Git VCS | Software Engg.  
*Jan – Apr 2019*  
Led the development of ERP software, managing contribution using a Fork – Pull request Git workflow
- **Recylotron 5000 – Bin for gamifying waste collection** **Skills:** Python | Raspberry Pi | Arduino  
*Sept – Nov 2018*  
Built an innovative bin which provides gamified incentives for users to deposit recyclable waste
- **JIGREE brand – Improving Jabalpur tourism sector** **Skills:** Service Design | Arduino  
*Sept – Nov 2018*  
Intervenes at all steps in tourists' journey by providing a central Android app during their stay in Jabalpur
- **Typing Tutor** **Skills:** Java | JavaFX | Eclipse  
*Oct 2017*  
Developed a touch typing tutorial app to practically learn Object Oriented Programming in Java
- **"Pandemonium" game for Carpe Noctem** **Skills:** Game Development  
*Oct 2017*  
Participated in and won a 72-hr institute wide gamejam based on the theme "Steampunk"

## Volunteer experience

- **Student volunteer** for SIGCHI-sponsored "**Expanding the horizons of HCAI**" summer school in New Delhi
- Core volunteer in **organising IIITDMJ Dribbble meet**
- Member of the **Working Committee of Samvaad**, IIITDMJ's literary & quizzing club

## Relevant coursework

- **Augmented, Virtual and Mediated Reality** (Spring '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)
- **Deep Learning** (Spring '20, IIITDMJ)
- **OOPS with Java** (Fall '17, IIITDMJ)
- **Data Structures and Algorithms** (Spring '17, IIITDMJ)

## Awards and Achievements

- **Entrance Graduate Fellowship (GF)** 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** **2017**  
out of 10 teams for making innovative Android app Tourism platform for discovery of offbeat places
- **Selected for the prestigious Kishore Vaigyanik Protsahan Yojana (KVPY) Fellowship** **2015**
- **Awarded Scholarship under National Talent Search (NTS) Scheme** **2012 - 2020**

## Leadership Roles

- Acted as leading member of **Institute Game Development group**, part of team which conducted **workshop on Unity** and participated in the **Ludum Dare** International Game Jam
- Part of 4-member **Project Steering group** leading development of **Institute ERP software (Fusion)**