

DEVIKA SANTOSH

Pittsburgh, PA | devikasantosh@gmail.com | +1 (412) 918 0704 | [LinkedIn](#) | [Portfolio](#)

PROFILE

An entertainment technology graduate student with a computer science background, a passion for Film & Animation Technology, and a keen interest in storytelling and immersive experiences. Combining my technical background with my love for art, I strive to merge the boundaries between creativity and technology.

SKILLS

Programming	Python, Java, C++, SQL, AI/ML, PyQt, MEL
Web Development	HTML, CSS, Three.js, WebGL, JavaScript
3D Software	Blender, Autodesk Maya
XR, Game Development	AR & VR development, Unity, Oculus, C#
Design	Graphic Design, UI/UX Design, Design Thinking, Figma, Adobe Illustrator
Art	Digital Art, Illustration, Procreate
Management	Production and pipelining, Project Management, Perforce
Soft Skills	Verbal & Written Communication, Problem Solving, Creative Writing

EDUCATION

CARNEGIE MELLON UNIVERSITY – Pittsburgh, PA Master of Entertainment Technology	Aug 2024 - Present
VELLORE INSTITUTE OF TECHNOLOGY – Chennai, India Bachelor of Technology Computer Science and Engineering, with a specialization in Artificial Intelligence and Machine Learning	Oct 2020 – May 2024
INDIAN INSTITUTE OF TECHNOLOGY, MADRAS – Chennai, India Bachelor of Science Data Science and Applications – Online Degree	Oct 2020 - Present

RELEVANT PROJECTS

Tools and Pipeline Projects ([View here](#))

- Created using Maya and Python scripting
- Scene Scatter Tool for Generating Archeological Ruins** - allows the artist to generate an archeological ruins scene by selecting 3D models of arches and pillars with varying levels of decay, and randomizing the scene by setting the number of 3D models they want and their relative distance.
- Programming Natural Variety** - Inspired by The Science behind Pixar exhibit on Programming Natural Variety, I created a tool where an artist can create a patch of grass by adjusting colour, variation in colour, height and width of grass blades, area of patch, curvature, and number of blades of grass.

Sign Language Learning with VR ([View here](#))

- Capstone project at Vellore Institute of Technology
- Implementing gesture recognition, gamification techniques and dynamic difficulty adjustment to create a VR application for teaching sign language to the hearing community.
- My thesis compared the traditional learning method, along with a randomized game-based method and two dynamic difficulty adjustment algorithms and measured factors like accuracy, time, knowledge retention, player feedback, and motivation and engagement levels.

Building Virtual Worlds (Carnegie Mellon University – Entertainment Technology Center project) ([View here](#))

- Took on the programmer role for multiple team-based projects, each running on a 2-week rapid prototyping schedule. Learnt new tools for each project, with teams of new people.
- Tools used: Microsoft Xbox Adaptive Controllers, Oculus Quest 3, DDR pad, Xbox Controllers.
- Took on producer roles in some projects, scheduled and organized team meetings, coordinated the artist-sound designer-programmer pipeline flow. Ensured the deliverables met the requirements of the project, and that daily work progressed in a timely manner. Organized playtests and feedback sessions with target audience and subject matter

experts.

- Also worked in a technical artist role, creating shaders for one project alongside programming and production.
- Additional focus on interest curves, affordability, intuitive interfaces for naïve guests, predicting player behaviour, increasing guest throughput.

WORK EXPERIENCE

INTERN - AR/VR - Bosch und Siemens Hausgeräte, India

Jun 2023 - July 2023 (8 weeks)

- Collaborated with the industrial design and user experience teams to visualize product design concepts, like Color-Material-Finish, Lighting and Rendering, and Consumer Pain Points for household appliances using Augmented Reality.
- The project, built using *Unity* and *Vuforia SDK*, helped designers visualize industrial design concepts using AR, with an application that reduces the need for a physical prototype of all its variations during the UX customer-testing phase.
- Worked on all the aspects of the project: technical development, coding, UI design, while closely collaborating with industrial designers for 3D models and understanding lighting and rendering techniques.
- Helped the team explore the possibilities of VR in industrial design through concepts like physics simulations and visualizations with force, drag, etc.

FREELANCE WEB DEVELOPER

July 2024 – Present

- Creating a portfolio and blog website featuring a learning platform for a client in personal and corporate financial planning education.

STUDENT RESEARCH INTERN - Vellore Institute of Technology, Chennai

Feb 2023 – Dec 2024

- Working on a review paper on AR/VR and its applications in reducing learning anxiety for students.

STUDENT PROJECT ASSISTANT - Vellore Institute of Technology, Chennai

July 2023 – May 2024

- Delivered a university-funded project for a VR IoT Lab, creating experiments in the fields of healthcare, agriculture, industry, security and smart home automation using Unity and Oculus.

LEADERSHIP EXPERIENCE

CHIEF DESIGNER

The Scientific Teen | 2022-Present

- Led the design team for an international, non-profit STEM magazine, curating article illustrations for our print edition, website, and social media.
- Worked collaboratively on *Canva* to design the magazine issues, and created scientific article illustrations on *Procreate*.

CONTENT & MEDIA LEAD AND CORE COMMITTEE MEMBER

HackClub VIT Chennai | 2022-23

- Led a team of content writers and designers to collaboratively create engaging social media, website designs, and offline marketing and promotional content for our club's events, and organized various events for university fests.
- Conducted *Figma* onboarding sessions for new members.

DESIGN LEAD

The Capsule VIT Chennai | 2021-2022

- Led the university magazine design team and created digital cover art illustrations for 4 editions, using multiple platforms like *Figma*, *Canva* and *Procreate*.

OTHER EXPERIENCES

- **IEEE Computer Society** - Member
- **Enactus VIT Chennai** - Member
- **Game Development Club, VIT Chennai** - Member
- **IIT Madras Online Degree** - Student Constitution Drafting Committee Member
- **Rhythms College of Fine Arts, Bangalore** – Violin - Trinity Grade 3
- **The Lewis Foundation of Classical Ballet, Bangalore** – Ballet - ISTD Grade 3