Amarnath Murugan
XR Researcher | Game Developer

Contact

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Links

Personal Site
3D Portfolio
LinkedIn
GitHub

Languages

English(ILR S-5)
Tamil(ILR S-5)
Japanese(ILR S-0)

Programming Languages

C#
C
C++
Python

Tools & Frameworks

Unity 3D
ARCore
Vuforia
SteamVR & Oculus SDK
Cardboard SDK
MixedRealityToolkit
After Effects
Photoshop
3DS Max

Specializations

XR & Gamedev
HCI
CGI Compositing

Education

2015–2019 — **SRM Institute of Science & Technology, Kattankulathur**
B.Tech in Computer Science (89.15% | Merit Scholarship recipient)

Experience

Since Feb'19 — **Research Assistant & Research Intern | IDC Scool of Design, IIT Bombay**
Researching on Cinematic VR and on AR for education, while assisting development of student projects

Nov'17-Jun'19 — **Student Ambassador | Unity Technologies**
Worked on democratizing XR and Game development among students

Aug'16-Jun'19 — **Researcher and Team Lead | Next Tech Lab**
Led the HCI group within the lab and was involved in various XR based projects

Feb'18-Feb'19 — **Vice-Chair | ACM SIGCHI Chapter, SRMIST**
Promoted the field of HCI through workshops and technical events

Jun'18-Jul'18 — **Summer Research Intern | IDC, IIT Bombay**
Conducted research on interactive movie experiences in VR

Jun'17-Dec'17 — **Research Intern | Merkel Haptic Systems, IIT Madras Research Park**
Implemented POCs in Hololens pertaining to the Health care industry

Dec'16-Jan'17 — **Intern | XR Labs**
Created product demos and POCs in hololens

Publications

Mar 2020 — **Poster | IEEEVR 2020**
Exploring Effect Of Different External Stimuli On Body Association In VR (In Press)

Nov 2019 — **Poster | VRST 2019**
Murugan, A., Pillai, J.S. and Dev, A., 2019, November. Cinévoqué: Development of a Passively Responsive Framework for Seamless Evolution of Experiences in Immersive Live-Action Movies. In 25th ACM Symposium on Virtual Reality Software and Technology (p. 59). ACM.

Nov 2019 — **Demo | VRCAI 2019**
Pillai, J.S., Dev, A. and Murugan, A., 2019, November. Till We Meet Again: A Cinévoqué Experience. In The 17th International Conference on Virtual-Reality Continuum and its Applications in Industry (p. 70). ACM.

Nov 2019 — **Short Paper | Journal of Physics: Conference Series**
"AnatomyMR: A Multi-User Mixed Reality Platform for Medical Education", Amarnath Murugan et al 2019 J. Phys.: Conf. Ser. 1362 012099

Sep 2019 — **Short Paper | INTERACT 2019**
Pillai, J.S., Murugan, A. and Dev, A., 2019, September. Cinévoqué: Design of a Passively Responsive Framework for Seamless Evolution of Experiences in Immersive Live-Action Movies. In IFIP Conference on Human-Computer Interaction (pp. 359-367). Springer, Cham.

Honors & Awards

Dec 2019 — **Best Hack | Music Hack Day 2019, Mumbai**
Won best music hack for building a multi-user VR tool for musical collaboration involving digital twins

Nov 2019 — **Speaker | IndiaHCI 2019**
Invited speaker at India's largest HCI conference under 'Out of India' section

Dec 2018 — **Speaker | Unite India 2018**
Spoke on 'Interest driven Cinematic VR' at Unity's national conference (*Link*)

Apr 2017	**Winner | Smart India Hackathon '17** Bagged the first place in the World's biggest Hackathon at the time

Highlighted Projects

Since June'18	**Cinévoqué** A Responsive Framework for Seamless Evolution of experiences in Immersive Live-Action Movies.
Since June'18	**Scholar** Researching on the design and technical challenges involved in deploying an affordable AR based educational solution for underserved kids
Jun'17-Jul'17	**AnatomyMR and Anatomy Explorer** AnatomyMR is a multi-user mixed reality platform that facilitates dynamic addition of mixed reality course content. Anatomy Explorer is a predecessor to this project, it is a hololens application that displays anatomical models in MR (*Link*)
Apr'17-Apr'17	**ARtifacts** An android app made during Smart India Hackathon'17,which leverages AR and VR for a better museum experience
Jan'15-Oct'16	**Design projects** Design projects exploring modelling and rendering workflows (*CGPortfolio*)

Courses

Sep 2019	**Monsoon HCI Course 2019** A two week intensive course that teaches HCI and UX through a hand on approach. My team and I work on a net banking solution for kids that could inculcate good financial habits
Feb 2020	**Quantitative Research Methods Course 2020** An accelerated course that covers quantitative research methods in HCI. During which I got to design, conduct and analyze an experiment meant to study time perception while playing games