Amrit Amar

a.amritamar@gmail.com
https://amritamar.github.io/ ● +1 (607) 697-3885

Education:

Cornell University, College of Engineering, Ithaca, NY 14853
Bachelor of Science in Computer Science, December 2019
Master of Engineering in Computer Science, May 2020

Experience:

Meta Reality Labs, Redmond, WA 98052
Software Engineer (Aug 2020 – Present)
Joined the Surreal research team on their AR device – Project Aria – for contextualized AI ● Designed and developed several key features such as telemetry, provisioning, audio, app-device communication, and multi-sensor time-domain synchronization ● Created a framework for testing the accuracy of the device's sensors ● Maintained a custom AOSP codebase and worked on native C++ and Java services

Cornell Graphics and Vision Group, Cornell University, Ithaca, NY 14853
Master of Engineering Student Researcher (Oct 2019 – June 2020)
I worked with Professor Steve Marschner and Professor Bruce Walter on "*Exploring photo-realistic material rendering in VR*" as my Masters of Engineering final project ● Used Unity and GLSL to implement the ellipsoid shading model, a more realistic model than the standard shading models present in graphics applications, particularly with anisotropic surfaces ● Tested this shading model in a real-time interactive VR environment and compared the look of various materials to real-life

Facebook, Seattle, WA 98109
Software Developer Internship (May 2019 – August 2019)
Joined the livestreaming team and implemented MPEG-DASH ingested live video feed for FBLite Livestreaming using a combination of C++, Java, and Python to improve reliability for live streaming in 3rd-world/developing countries ● Created an end-to-end working prototype that allows the user to go live from FBLite

LiveLike, New York City, NY 10011
Software Developer Internship (June 2018 – August 2018)
Worked with Unity and ARKit/ARCore to create augmented reality sports viewing experiences for mobile devices ● Devised ways to show live data and statistics in augmented reality ● Designed and implemented a gamification social platform with friends, chat rooms, and mini games

Robotics Personal Assistants Lab, Cornell University, Ithaca, NY 14853
Software Team (April 2017 – January 2018)
Working with Professor Ross A. Knepper's research group on creating a Solar-Powered Autonomous Blimp capable of independent flight for extended periods of time ● Developed higher-level planning algorithms, UI design, and designed communication nodes using ROS

CurioPets, Palo Alto, CA, 94301-2326
Augmented Reality Developer (August 2017 – October 2017)
Participated in a VR Summer Bootcamp hosted by DIVR Edu, a startup that creates educational content to teach students in schools ● Designed VR/AR projects and developed CurioPets, a multiplayer simulation AR iOS game using ARKit

Skills:
Programming experience: C++ ● Java ● Python ● C# ● Visual Basic ● R ● OCaml
Relevant skills: Microsoft Office Suite ● Photoshop and 3D design with 3ds Max ● Linux ● Arduino Microprocessor/Raspberry Pi ● Unity (Game Design, AR/VR Development) ● ROS Programming ● TensorFlow/SciKit ● NLP Libraries (NLTK, spaCy, FastText, *2vec) ● Graphics (GLSL, rendering) ● AOSP

Awards:
● *Botswana Top Achievers:* I was selected as a top achiever from the Botswana Government because of my IGCSE and A-Level results. I am fully sponsored for any tertiary education program around the world.
● *Best Game Programmer in Africa 2013 & 2014:* I participated in a programming competition for all high-school students in Africa. I won twice in a row and got the chance to work on Minecraft Source Code and meet Game Developers.
● *IT Innovation Award in the Botho College ICT Linkz Challenge:* I made a robotic hand using Arduino Microprocessor that can be used to help miners in dangerous situations. (*Demonstration:* http://bit.ly/2wq5nQC)
● *Most Innovative Game at GDIAC 2018 for OutOfSync:* I took Game Design in 2018 Spring semester and won the overall most innovative game award at the Cornell Game Design Showcase. (Download the game: https://bit.ly/2GAKGTN)
● *Cornell Computer Science Student Recognition Award:* I received an award from the Cornell CS Department for my work at the Association of Computer Science Undergraduates as the Corporate Chair.