Amrit Amar

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Education:

Cornell University, College of Engineering, Ithaca, NY 14853
Bachelor of Science in Computer Science, December 2020
Master of Engineering in Computer Science, May 2020
Botswana Top Achievers Scholar ● Association of Computer Science Undergraduates (ACSU) Corporate Chair

Experience:

Facebook, Seattle, WA 98109
Software Engineer (Aug 2020 –Present)
Just started!

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)
Worked on implementing MPEG-DASH ingested live 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 and use the DASH ingestion stack

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 ● Designed 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 ● Working on higher-level planning algorithms, UI design, ROS programming

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 ● Worked on building VR/AR projects and developing CurioPets, a multiplayer AR iOS game

Selected Courses:

Object-Oriented Design and Data Structures - Honors ● Functional Programming ● Computer Systems Organization and Programming ● Operating Systems ● Analysis of Algorithms ● Foundations of AI and Advanced AI ● Computer Graphics ● Beginners and Advanced Game Architecture ● Analytical Game Design ● Natural Language Processing ● Computational Linguistics ● Computational Neuroscience ● Computational Genetics and Genomics ● Evolutionary Algorithms ● Data Science ● Graduate Computer Vision ● Machine Learning for Intelligent Systems
Various projects and writeups I have done for some of these classes are available on my website.

Skills:
Computer 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 (in both ML/NLP) ● NLP Libraries (NLTK, SpaCy, FastText, *2vec) ● GL Shading Language ●
Programming Experience: Java ● Visual Basic ● Python ● Arduino ● R ● C/C++ ● C# ● OCaml

Awards:
● *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.