

Elijah Zulu

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EDUCATION

Columbia University

C.P Davis Scholar | B.S in Computer Science

New York, NY

Sep 2019 – May 2023

WORK EXPERIENCE

Software Engineer Intern

Microsoft Corporation

May 2022 – August 2022

New York, NY, Atlanta, GA

- Worked across multiple large scale code bases in C and typescript react. Business Applications and Platforms
- Implemented a feature for Microsoft's Power Apps Studio for JSON Object to YAML serialization and download
- Contributed to Microsoft's Open Source project initiative

Undergraduate Researcher

Columbia University - Internet Real-Time Lab

May 2021 – August 2021

New York, NY

- Helped develop new abstraction and discovery mechanisms to make programming large-scale IoT systems feasible
- Developed a system/workflow for creating Virtual Reality(VR) digital twin systems without experience developing in VR

Undergraduate Researcher

Columbia University - Graphics and User Interfaces Lab

June 2020 – May 2021

New York, NY

- Working under the Graphics lab to implement GNSS/SLAM approach to navigation using Augmented Reality
- Acted as one of the leads in developing an object recognition pipeline for Columbia Space Initiative's NASA SUITS challenge

Front-End Web Developer

Columbia University School of International and Public Affairs

December 2020 – April 2021

New York, NY

- Refactored and added additional functionality to an in-house tool that facilitates the design of classes on Courseworks/Canvas.
- Conducted User Interface studies involving professors and course assistants

Technical Coordinator, Editor

Columbia University Picker Center Digital Education Group

Sep. 2019 – Present

New York, NY

- Coordinated the post production for a large number video projects and case studies
- Worked in the post production of a Climate Change documentary for the UNDP (United Nations Development Programme)
- Developed content and workflow for a MOOC (Massive Open Online Course) about using video case studies for education in Columbia's EMPA Program in collaboration with the Open Society University Network

PROJECTS

IoT Digital Twins | C#, Unity3D, MQTT, Javascript

May 2021 – August 2021

- Worked with IoT researchers to understand what workflow is best from their perspective as users
- Wrote custom software to connect an MQTT Server to 3D Objects in Unity3D

National Museum A.R Tour | C#, Unity3D, Vuforia SDK, EasyAR SDK

June 2018 – Present

- Developed an interactive Augmented Reality tour app for the Lusaka National Museum
- Worked with the Smithsonian Digitization Program to provide access to 3D models through the app

Spark AR | SparkAR, Javascript, Texture Mapping, 3D Modelling and Animation

October 2019 – Present

- Facebook SparkAR developer for the Instagram platform
- Garnered over 1 Million organic impressions
- Collaborated with other artist and creators to bring a new level of engagement between them and their audience using Augmented Reality

TECHNICAL SKILLS

Languages: C#, C/C++, Java, Python, JavaScript(VUE and React Native), HTML/CSS, Typescript React

Developer Tools: Google Cloud Platform, Git, VS Code, Visual Studio, Bash

Design Skills: Adobe Creative Cloud, 3D Animation, 3D Modelling and Texturing, Virtual and Augmented Reality

Libraries: OpenCV, OpenGL, NumPy, Matplotlib, pandas