A/Z ABHAY ZALA

UNC COMPUTER SCIENCE MAJOR

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ABOUT ME

Seven years of web and application development experience. Many awards at hackathons. Research Assistant at the MURGe-Lab (UNC-NLP Group).

Strong programming skill in Python, Java, C#, C, JavaScript, and HTML/CSS. Experienced with Machine Learning, AWS, GCP, IBM Cloud, Docker, Unity, Node.JS, Git/GitHub, 3D modeling, and animation. Expert certified in Excel.

EDUCATION

Computer Science Major (B.S.)

UNC Chapel Hill
Class of 2023

Statistics and Analytics Minor

UNC Chapel Hill
Class of 2023

PUBLICATIONS

Research paper titled, "ArraMon: A Joint Navigation-Assembly Instruction Interpretation Task in Dynamic Environments", accepted into EMNLP Findings. https://arxiv.org/abs/2011.07660

COURSEWORK

- Java Programming
- Special Topics in Computer Science
- System Fundamentals
- Data Structures
- Computer Organization
- Models of Languages and Computation
- Calculus I, II, III
- Discrete Mathematics

EXPERIENCE

Summer Intern 2020 (May – August)

Interned at the MURGe-Lab (UNC-NLP Group) research lab. Developed an AI model to interpret natural language instructions and carry out robotic action tasks. Model was built in Python using PyTorch and a simulation environment was built in Unity with C# and hosted on AWS. Research paper accepted into EMNLP Findings.

Undergraduate Research Assistant 2019 – Present

Researching new ideas and directions for Natural Language Processing (NLP) and Machine Learning at the MURGe-Lab (UNC-NLP Group). Primarily focused on integrating NLP with other fields of research such as Computer Vision and Embodiment.

TSA President 2018 – 2019 TSA Member 2015 – 2019

Software developer and leader at the school Technology Student Association (TSA). I have won several awards from TSA.

Webmaster 2018 - Present

Created and maintain the following websites using HTML5, CSS3, and JavaScript/jQuery

- Personal website portfolio - aszala.com
- TSA webmaster - aszala.com/2019-webmasters

Game and Application Developer 2014 - Present

Developed several games and applications.

- AI for presentations that won NCSU Packhacks Hackathon 2019
- AI virtual assistant using Python, OpenCV, TensorFlow, and IBM Watson
- Developed many games from scratch in Java and using Unity with C#
- Developed my own Game Engine in Java capable of making 2D games with many advanced features such as mesh collisions, particle systems, and ray tracing