Dhruv Sharma

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Education

University of Central Florida *January 2024 – Current*
Bachelor of Science in Information Technology

Valencia College *December 2023*
Associate in Arts in Computer Science

Skills

Programming Languages: C, Java, Python, JavaScript, HTML, CSS
Software Tools & Libraries: Git/GitHub, VS Code, Windows, Linux, Pandas, NumPy, Matplotlib, Torch, Transformers, Tensorflow, ReportLab

Projects

AI Summary Writter – *December 2024*

- Extracts audio from any files using FFmpeg and processes the audio through several stages.

- Utilizes the Faster Whisper model from Hugging Face to transcribe audio into text, leveraging pre-trained models for accurate results.

- Implements a summarization feature using a transformer model to condense the transcribed text, capturing key points.

- Formats the summarized text into a PDF document, ensuring improved readability and usability for various documentation needs.

C Compiler – *July 2024*

- Designed and implemented a compiler for the SimpleC programming language in C, consisting of three incremental stages.

- Created robust type-checking features, implemented static scoping, and established symbol table management for the Abstract Syntax Tree (AST) used in SimpleC applications.

- Enhanced the compiler's functionality to include support for function definitions, variable declarations, arithmetic operations, and code generation for integer operations and pointers, specifically handling 64-bit integers and pointers.

- Upgraded the compiler to support various control-flow structures, boolean logic, unary reference and dereference operations, and relational operators tailored for pointer variables, including support for one level of pointer indirection.

Extracurricular Activities

Knight Hacks at UCF – Member *August 2024 – Present*
Participated in the Knight Hacks Hackathon 7. Our project is called SpoilerAlert!

First Tech Challenge (FTC) Robotics / Mentor *January 2021 – January 2023*
Orlando Science School, Orlando, FL

- Mentored students in STEM fields through the FIRST Tech Challenge (FTC) robotics program.

- Fostered teamwork, problem-solving, and critical thinking skills in a project-based learning environment.

- Provided guidance on robot design, construction, and programming.