Nisitha Jayatilleka

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Education

2015 | BASc. Engineering (spec. Mechatronics) - University of Toronto.
GPA(Last 2 years): 3.17
Deans List: 2013-2014

Skills

- Programming Languages: Python, Java, C++, Javascript, Bash
- Web development: Django, MongoDB, Angular2, React
- Machine Learning: Tensorflow, Sci-kit Learn

Work Experience

Oct 2016 – Dec 2017 | Co-founder & Fullstack Developer Mi-Bot Solutions (start-up). | Funded By UofT Hatchery.
Facebook Chatbot for Retail Industry
Using Django, MySQL, OpenAI

- Designed a website to showcase the functionality, took it live as a MVP.
- Lead the implementation of the chatbot AI for Product Browsing and Customer Service.
- Implemented NLP for the chatbot with tokenizers, tri-gram models, stemmers and word matching improving error rate by approx. 50%.
- Took the project through 2 rounds of funding pitching to about 15 VCs achieveing $10000 in funding.

Projects

Co-founder, Developer & Game Designer at Adahas (Start-up).
Indie. game development
Using Unity

- Implemented character movement and enemy AI.
- Implemented models and animations through Spriter and Blender for 2D and 3D assets respectively.
- Developed workflow and design pipeline for the project to increase efficiency and coordinated tasks amongst team mates.

Clone of Super Mario Bros.
Android/Desktop game written using Java (Android Studio)
Developed the first level of the classic Super Mario Bros. for desktop and Android platforms.

- Used Tiled to create the world map.
- Implemented basic game mechanics, animations and controls.

Undergraduate Thesis Control of Micro-bots via magnetic field manipulation.
Vision Feedback Control system - Simulink, Matlab, OpenCV, Arduino, C++

- Developed a theoretical model of the movement of the microbot.
- Designed the feedback control system and implemented it using an Arduino Mega 2560.
- Achieved visual tracking of the bot using OpenCV library.

University of Toronto Mechatronics Design Association Mechanical Team Lead (2014 -2015).
Construction of Robotic Submarine for participation in the San Diego Robosub Competition.
Lead the construction of a new submarine, and its peripherals.

- Recruited members for the mechanical team and lead the onboarding of the new recruits.
- Lead the team in designining a completely new hull for the submarine.
- Designed and impletemented various testing procedures for hull integrity.
- Set timelines and milestones for the project guaranteeing the completion of the submarine for participation in the competition.

Further Learning

- Neural Networks for Machine Learning (U of T at Coursera) - Geoffrey Hinton
- Machine Learning (Stanford University at Coursera) - Andrew Ng
- Deep Learning Specialization on Coursera (Current)