Vikas Thamizharasan

Personal Data

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Education

2014 - 2018   **B.Tech in Computer Science and Engineering**, *IIIT* , Hyderabad, .

2012 - 2014   **Senior Secondary**, *New Millennium School,DPS*, Bahrain, .

Projects

Cloth Parser and Fitter, *(2D Virtual Clothing Store)*.

An Augmented Reality based application which contains an unconstrained clothing parser and a fully fledged cloth fitter. An individual uploads a fully body picture onto the application and then can choose any clothing item from any online retail store and fit these clothing items onto his/her picture.Currently implemented purely with Image Processing, using superpixel segmentation,cloth morphing and warping,pose estimation and feature point extraction and image filters.

Vanilla.js, MATLAB, OpenCV, flask, Scipy, Numpy, JSON.
Source

Typer Defence.

3D game where the player has to type in words and come up with words/phrases on the fly in order to defeat oncoming enemies, and protect his/her's tower. Each enemy will have a word/phrase associated with it.
Unity game engine, C Sharp, GLSL

OCREX.

A fast and efficient document capture and processing application.It extracts data from bank, credit card,invoice, online statements or any scanned document and automates the process of extracting the data and storing them in custom templates.

Windows Form App, C Sharp, Tesseract-ocr, MySQL, JSON.
Source

OSM MoRe.
A Model Repository for Open Street Map. Web application for sharing and viewing 3D-Models to use in OSM-related 3D-Applications. GSOC 2016 proposal for Open Street Map.
WebGL, three.js, Django

421 Studios/Shapespark.
A 3D web based virtual apartment viewer that enables users to create real-time web-based visualizations of apartment exteriors and interiors with physically accurate lighting. Build using three.js and unity.

Tic-Tac-Toe - AI.
An AI for Ultimate Tic Tac Toe written in Python using self implemented heuristics and alpha-beta and min-max algorithms.

Slither.io - AI.
Slither.io AI written in JS.
Source

Vshell.
Linux Shell made from scratch in C.
Source

Typophobe.
Typing Speed Test , Returns WPM and offers custom typing text. Microsoft Code.Fun.Do finalist Hyderabad. Build in JS on Visual Studios.
Download: http://bestwindows8apps.net/app/typophobe
Source

P2P.
A basic P2P file sharing script to send files via TCP/UDP written in Python.

Achievements

2017 **Microsoft Code.Fun.Do Winner Hyderabad**.

2016 **Finished in Top 20 Microsoft Code.Fun.Do All India** - .

2015 **Runner's Up in Microsoft Code.Fun.Do Hyderabad**.

2014 **2400/2400 in SAT Subject Test**.

2013 **Top 5 in WHO Art competition**.

2012 **CGPA: 10/10 in CBSE Board Exams**.

Experience

2016 **Teaching Assistant**, *IIIT Hyderabad*.

2016 **Software Developer**, *Rsquare Technologies*, Bahrain.
Developed a fast and efficient document capture and processing application called OCREX.

Courses taken

2017.
Statistical Mechanics in AI , Computer Vision

2016.
Digital Image Processing: *Rafael Gonzalez*,
Complexity and Advanced Algorithms: *TOC Michael Sipser*,
Computer Graphics,
Artificial Intelligence : *AIMA Norvig, Russell*,
Principles of Programming Languages : *EOPL Friedman*,
Digital Signal Analysis, Database Systems.

2015.
SSAD, Data Structures, Computer Networks
Operating Systems: *Remzi*

Technical skills

Programming Languages	C,C Sharp, C++, Python, Javascript, Shell, MATLAB, Racket/Scheme, HTML and CSS, PHP(basic).
Frameworks	Web2py, Django, Ruby on Rails,Windows Form App
Tools	MATLAB
IDE and editor	Visual Studios,CodeBlocks, Sublime Text
Version Control	Git

Interests

○ Art, Sculpting, Drums and Music

○ Image Processing,Game Development,Computer Vision,Virtual/Augmented Reality,Web Development,Open Source Development

○ Psychology, Philosophy, Cosmology