TANVI SHAH

202 South 4th Street, Champaign, Illinois – 61820 | 217-305-1570

CONTACT

202 S 4th Street, Champaign,
61820, United States
tanviss2@illinois.edu

LINKEDIN

www.linkedin.com/in/shah-tanvi

WEBSITE

https://www.shahtanvi.com

SKILLS

Python

C++

C

Java

TensorFlow, PyTorch, Keras

System Verilog

LC3 Assembly

Microsoft Excel, Word

MATLAB/Simulink

Tableau

COURSE EXPERIENCE

Computer Vision

Advanced Information Retrieval

Software Engineering

Deep Learning Specialization

Principles of Safe Autonomy

Computer Security

Advanced Distributed Systems

Digital Systems Laboratory

Data Structures

Probability in Engineering

Applied Linear Algebra

Digital Signal Processing

IC Device Theory & Fabrication

ACTIVITIES

Indian Classical Dancer (Kathak & Bharatanatyam)

Core organizing team at the U of I Astronomical Society

Member of WIE (Women in Engineering)

EDUCATION

Masters in Engineering, Electrical and Computer Engineering, University of Illinois at Urbana-Champaign, Concentration: Computing Systems, Networks, Software and Algorithms

August 2020 — May 2021

GPA: 3.94

Bachelor of Science, Electrical Engineering, University of Illinois at Urbana-Champaign

August 2016 — May 2020

GPA: 3.73

PROJECT HIGHLIGHTS

SwAV Analysis – Evaluated performance of Facebook AI's SwAV algorithm (implemented using PyTorch) with the CheXpert dataset and compared it with supervised pre-training models

Reddit BDI – Created a BERT-based model to predict whether a person is suffering from depression based on their Reddit posts scraped using the Reddit API. Deployed the Web Application using Google Cloud Platform

iTrust – Lead a team of 8 to write new user stories for iTrust – a web application to manage internal logistics of a health center. Followed Test-Driven Development and utilized version-control to complete the 2-month long project. Apart from being responsible for creating a new user feature, I wrote Unit and Selenium tests

Low-Speed Adaptive Cruise Control for Autonomous Vehicles – Detected pedestrians in front of the GEM car with LIDAR sensors and implemented adaptive cruise control on both the GEM car and in simulations (using ROS and Gazebo)

Simple Distributed File System – Designed a Simple Distributed File System (with 10 VMs) along with a new cloud-computing framework called MapleJuice (similar to MapReduce of Apache Hadoop)

Indoor Localization System - Built a functional dead-reckoning based indoor localization system. Accelerometer and Gyroscope data was collected using a phone's IMU and was analyzed to plot user's trajectory.

Pacman - Built a version of the arcade game 'Pacman' by combining and optimizing both hardware and software on an FPGA in System Verilog and C code (SoC). It included an AI-powered ghost and multi-user functionality and interfaced with both a VGA monitor and keyboard using USB port and JTAG UART core

WORK EXPERIENCE

Capstone Project

Schlumberger, January 2021 — May 2021

Created a WebApp which allowed users to upload PowerPoint presentation reports. The backend AI processed it and generated a review report highlighting grammatical and other rule-based errors. The app used a flask server, and was coded using Python and Bootstrap.

Photonic Devices Research Group

University of Illinois at Urbana-Champaign, May 2019 — August 2019

Collaborated with the Photonic Devices Research Group under Professor Kent Choquette to fabricate semiconductor laser diodes during Summer 2019. The semiconductor lasers had InP and GaAs substrates. Employed methods of optical lithography, SiO2 deposition, dielectric and semiconductor plasma etching, and Au thermal evaporation.

Grader for ECE220: Computer Systems & Programming

University of Illinois at Urbana-Champaign, August 2018 — December 2018

Coordinated with other course organizers. Mentored students and graded and organized their programming assignments under Professor Yuting Chen during the Fall 2018 Academic term.

Software Engineering Intern

Dell EMC (Mumbai), June 2017 — August 2017

Completed an 8-week long internship at DELL EMC2 where I developed a storage sizing software and also developed storage solutions for clients. Analyzed different kinds of storage devices and created modified hardware models to increase storage efficiency and improve data security.