

Siddharth Chillale

Software / Graphics / Visuals

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TECHNICAL EXPERIENCE

Data Analyst Intern, Shaadi.com, Remote

04/2020 - 06/2020

- Built an end-to-end pipeline for extraction, parsing and transformation of **300+** reports and loading into a visual frontend for analysis on domestic and international flights for the past 4 years.
- Improved workflow efficiency by **20%** through automating pipeline for transformation from PDFs to CSVs.
- Analyzed data of Airports Authority of India (AAI) to gauge the effect of the COVID-19 pandemic on the economy of air travel.

PROJECTS

Stanford PintOS operating system

09/2021 - 12/2021

- Implemented priority scheduling, priority donation using MuliLevel Feedback Queue System for kernel threads.
- Accomplished support for user programs by implementation of kernel system calls and a virtual file system.
- Developed operating system components for execution of multi-threaded programs.

PathTracer with Global Illumination

09/2021 - 12/2021

- Implemented Monte Carlo path tracing for global illumination.
- Rendered realistic illumination of models using Lambertian and Specular Lighting Models.
- Rapid rendering of materials with different reflection and refraction models.

MeshEditor

09/2021 - 12/2021

- Developed local mesh operations including vertex operations, edge operations, face operations.
- Developed global mesh operations such as loop subdivision and triangulation.

TECHNICAL SKILLS

Languages and framework - C/ C++ (proficient) , Python (fluent), SQL (prior experience)

Software Libraries - DirectX, Win32, COM, OpenGL

Software Tools - Git, MSVC, Linux, Windows, MATLAB, GDB

Math - 3D Math, Linear Algebra, Randomized algorithms, Probability and combinatorics, Calculus

EDUCATION

University at Buffalo, The State University of New York, NY

2021- Present

Masters in Computer Science [3.4/4.0 GPA]

Coursework - Computer Graphics, Operating Systems, Distributed Systems, Analysis of Algorithms, Processing Strings and Sequences

Indian Institute of Information Technology, Tiruchirappalli (IIIT), Trichy, India

2017-2021

Bachelor of Technology in Computer Science [8.5 /10 GPA]

Coursework - Database Management Systems, Design and analysis of parallel algorithms, Computer Architecture, Principles of compiler design

VOLUNTEER WORK

- Introduced around **20** professionals from diverse fields to programming with python under Dr. Jyotikrishna Dass at Texas A&M University, TX. Assisted in organizing the curriculum and preparation of the course materials.
- Co-founded HacktoberFest chapter at the Indian Institute of Information Technology, Trichy, TN, IN and mentored **~50** individuals towards open-source contribution.

CERTIFICATIONS

Deep learning specialization, Deeplearning.ai, Coursera

05/2020

- Neural networks and deep learning, Improving deep neural networks (hyper-parameter tuning, regularization, optimization)
- Convolutional Neural Networks, Image Segmentation, Face Recognition Neural Style Transfer
- Sequence Models, Transformer Networks, Recurrent Neural Networks

Machine Learning, Stanford, Coursera

01/2020

- Linear and logistic regression, optimization techniques, Multiclass classification