Surya S Dwivedi

surya1997@utexas.edu | 512.228.9336
linkedin.com/in/surya-s-dwivedi-3a2057108

EDUCATION

UT AUSTIN
MS in Computer Science
Aug 2019 - Feb 2021 (Expected)
GPA: 4.0/4.0

IIT KHARAGPUR
B.Tech in Computer Science
May 2019 | Kharagpur, INDIA
GPA: 9.09/10

COURSEWORK

GRADUATE
Reinforcement Learning
Numerical Optimization
Deep Learning Seminar
Programming Languages
Data Mining
Unconventional Computation

UNDERGRADUATE
Algorithms
Data Structures
Discrete Structures
Operating System
Distributed Systems
Database Management

SKILLS

LANGUAGES
Proficient
C • C++ • Python
Familiar
Java • MySQL • Clojure • Lisp

LIBRARIES
Pytorch • Tensorflow • Numpy
• OpenCV

FRAMEWORKS
Android • Django • Git

ACTIVITIES

• Member of National Service Scheme(NSS), IIT Kharagpur
• Software Team Member in Swarm Robotics, IIT Kharagpur
• Keyboardist and Badminton player for Azad hall

EXPERIENCE

TELESEAT INC. | Summer Internship
May 2020 - Present | San Fransisco, CA
- Founding member of Teleseat.com - a platform for hosting virtual events and conferences
- Implemented the complete video-communication backend from the ground up using WebRTC protocol
- Implemented a server side plugin for computer vision related tasks like virtual background, lighting adjustments etc.
- Technologies and Frameworks: WebRTC, OpenCV, GStreamer

GOOGLE SUMMER OF CODE 2019 | Student Developer
May 2019 - Sep 2019 | Org: CERN, Geneva
- Developed LSTM and GRU layer functionalities in TMVA, a C++ library used at CERN for particle physics data analysis
- Tested the layers on a real particle physics classification task and achieved 8% higher accuracy than previously implemented RNN Layer

ADOBE RESEARCH | Research Intern
May 2018 – July 2018 | Bengaluru, India
- Proposed a novel method for extracting template out of banner images and inserting user content into it, optimizing the resulting layout
- Generated banners received an average user score of 3.7/5 compared to 4.0/5 for banners made by designers
- Work published at IUI 2019 [Link]. Filed a patent with USPTO

SELECTED PROJECTS

SEARCHING EFFICIENT NEURAL ARCHITECTURES USING RL
Sep 2019 - Dec 2019 | RL Course Project - UT Austin
- Implemeted a policy gradient method for searching space and latency efficient neural architectures in pytorch
- Used an RNN as the policy network

DISTRIBUTED LOG DATABASE
Jan 2019 - May 2019 | Distributed Systems Course Project - IIT KGP
- Implemented a distributed system for storing and interacting with multiple logs in python using RPyC library
- Supported read, write and trim operations

HONORS AND AWARDS
- Secured 44th rank in ACM ICPC India Regionals 2017 at Chennai
- Awarded Gorelal Syngal Memorial Scholarship at IIT Kharagpur
- Secured 219th rank in IIT-JEE 2015 among 1.3 million candidates
- Secured 5th rank in KVPY 2014, an all India research fellowship exam
- Selected for Indian National Mathematics Olympiad 2013 and 2014