NEETHU RENJITH

Looking for full time positions in Software Engineering, Machine Learning, Data Science

@ neethur@stanford.edu
linkedin.com/in/neethu-renjith/
neethurenjith.com
www.github.com/Neethu-nr

EXPERIENCE

AI for climate change with Prof. Andrew Ng Research assistant

July-Dec, 2019 CA, USA

- Explored semi-supervised learning methods to handle large unlabeled datasets with minimal hand labeling. Achieved 250% higher accuracy compared to purely supervised methods by utilizing unlabeled data on benchmark datasets.

Stanford University Teaching assistant

Feb 2019-Mar, 2020 CA, USA

- "Information retrieval and web search" with prof. Chris Manning
- "Control design techniques" & "Dynamics" with prof. Steve Rock

PROJECTS

CNNs for visual recognition **Videos from image using GANs**

- Created 3 second videos from a single frame using GANs and generative convolutional LSTMs trained on AWS.
- Stylized the videos using multi-style fast neural style transfer.

Deep learning **Point cloud classification**

- PyTorch models were developed to evaluate best configuration for robot grasping. Models were trained on point clouds created from RGBD images in YCB database.

Machine learning **Effectiveness of MOOC videos**

- Used transcript level features to predict course engagement and model user behavior based on click-stream measures.
- This work has been presented at the BayLan 2019 conference

Robotic software **Autonomous food delivery bot**

- Programmed TurtleBot on a ROS platform to explore and map miniature city using EKF SLAM.
- Food items identified, during exploration, using pretrained neural net could then be collected efficiently as per user request.

Satellite software **Cubesat software development**

- Designed and implemented complete state machine for PandaSat.
- Integrated hardware components through micro-controllers using CircuitPython and performed hardware in the loop simulations

C++ Programming Abstractions **Texting Application**

- Created a multi-client server and supporting client application for windows OS using standard C++ libraries to efficiently handle texts.

Computer systems **Heap allocator**

- Implemented implicit and explicit free list allocator in C.
- Doubly-linked list was implemented using block headers to keep track of memory usage and to support memory coalescing and recycling.

EDUCATION

MS in Aero/Astro

Stanford University

Sept 2018 – June 2020

B.Tech in Aerospace Engineering

Indian Institute of Technology

May 2014 – May 2018

Minor : Industrial Engineering
Thesis : Coordinated guidance and control of two satellites for rendezvous and docking

ACHIEVEMENTS

- Paper presented at the BayLan 2019 conference: Predicting Clickstream Engagement in MOOCs
- Awarded KC Mahindra scholarship for graduate studies and Merit Cum Means for Undergraduate studies by the Central Govt. of India

SKILLS

C | C++ | Python | PyTorch | Tensorflow | Spark | SQL | R* | OpenMP | MPI | CUDA | HTML | CSS | JavaScript* | UNIX | ROS-Robot Operating System | MATLAB

* Currently learning

COURSEWORK

CNNs for visual recognition | Deep learning | Applied machine learning | Decision making under uncertainty | Computer organization systems | Principles of robotic autonomy | Mining massive data sets