Nihal Dhamani

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nihaldhamani nihaldhamani

EDUCATION

UT AUSTIN
B.S. Computer Science
B.S.A. Astronomy
Middle Eastern Studies Minor
Expected Dec 2019 | Austin, TX

JOHN FOSTER DULLES HS
Grad. May 2015| Sugar Land, TX

SKILLS

PROGRAMMING
Proficient:
Python • Java
Working Knowledge:
C • Go • MATLAB • SQL • CSS
Bash • HTML • PHP • JavaScript

TECHNOLOGIES
Git • TensorFlow • Android Studio
OpenCV • Amazon Web Services
Docker

INTERPERSONAL
Project Management

COURSEWORK

Computer Vision
Artificial Intelligence
Software Engineering
Data Structures
Algorithms
Operating Systems
Computer Architecture
Mobile Computing
Statistics and Probability
Linear Algebra

ACTIVITIES

TEXAS BLAZERS
Vice Chair of Community Service | Sept. 2016 - Present
Service organization devoted to serve UT Austin and the surrounding community

EXPERIENCE

NASA JET PROPULSION LABORATORY
Software Engineering Intern
May 2018 - August 2018 | Pasadena, CA

- Improved efficiency of cloud operations for the Mars 2020 Ground Data Systems team
- Established endpoint health monitoring system hosted on AWS making use of various technologies including Docker and ElasticSearch
- Wrote scripts to efficiently manage LDAP security groups
- Employed use of Go to automate the process of GitHub issue labeling for project management

TEXAS SPACECRAFT LABORATORY
Seeker1 ML/CV Lead
September 2017 – Present | Austin, TX

- Designed, implemented, and tested machine learning and computer vision algorithms for NASA's JSC Seeker Mission
- Trained a convolutional neural network (CNN) to detect target spacecraft in orbit using Python and TensorFlow
- Developed multi-threaded auto-capturing software to process and save spacecraft images using various computer vision techniques to extract orbital information
- Organized and led weekly team meetings to brief on progress and delegate tasks

METECS
Engineering Intern
May 2017 – August 2017 | Houston, TX

- Part of the RFID-Enabled Autonomous Logistics Management (REALM) team at NASA's Johnson Space Center
- Designed, implemented, and tested a voice user interface system for an inventory tracking system that is deployed on the International Space Station
- Created a real-time inventory tracking website using data from RFID sensors
- Deployed a server to interact with data from inventory tracking website, RESTful API's, and AWS

PROJECTS

OBJECT DETECTOR
Android application integrated with an object detection model. Allows for saving and retrieval of detected objects

AUTONOMOUS RC CAR
Employed use of Arduino, Raspberry PI, OpenCV, and TensorFlow to create a self-driving car

NBA WEBSITE
Full-stack website organizing information about NBA players, coaches, and teams

PONG
Interactive web game developed in JavaScript with AI implementation