Kalyan Madanapalli

kalyan19@vt.edu | 703-625-0923 | github.com/kalyan19

Education

Georgia Institute of Technology

- Program: Master of Science in Computer Science
- Specialization: Machine Learning

Virginia Polytechnic Institute and State University

- Major: Computer Science (BS)
- Cumulative GPA: 3.62 / 4

Skills

- **Languages**:
  - Java (proficient), Python (proficient), C (familiar), C++ (prior experience), Perl (prior experience), JavaScript (prior experience), HTML (prior experience)
- **Software, Frameworks, and Tools**:
  - PostgreSQL, Redis, Spring, Hibernate, REST, Storm, OpenStack, OpenCV, TensorFlow, MATLAB, ROS, PreScan, Android Studio, Google Firebase, Jenkins, Maven, Puppet, Splunk, Camel, Kafka, JIRA, Git

Work Experience

Software Developer at Solers, Inc	• Working with processing satellite and sensor data in the backend • Worked with astrophysics algorithms such as propagating satellite orbits in time • Created data models with Hibernate and saved into Postgres database • Wrote REST calls to retrieve information from database • Worked with image processing pipeline for sensor data	June 2018 to Present
Co-op at Solers, Inc	• Added features such as user roles and workflows for Request Tracker (virtual help desk application) • Created a puppet module to deploy a fully configured Request Tracker to cloud instances (in Open Stack) • Created and packaged a Splunk app with all preexisting dashboards	Summer, Fall 2017
CS Molecular Dynamics Research	• Worked with visual molecular software like VMD, Pymol • Created a short molecular movie of the interactions of a specific nucleosome • Developed a VMD plugin that displays additional information regarding the residue selected in VMD	Summer 2017
CS 2505 Teaching Assistant	• Helped students in the course CS 2505 (intro to C/Unix) with homework and relevant coursework • Held weekly office hours where 4-8 students would come for help	Spring 2017

Projects

Face Detection with Neural Network	• Created and trained a convolutional neural network to classify faces given a 128x128 pixel image with a 2000+ image dataset • Written in python using TensorFlow library	Summer 2018
AutoDrive Challenge	• 3 year competition to develop an autonomous vehicle to navigate an urban driving course • Developed a camera-based stop sign detection node in ROS • Worked with modeling sensors like LiDar in PreScan	Fall 2017, Spring 2018
TA Tips	• Mobile android app meant to connect students with students for tutoring each other	Spring, Summer 2017