­­ Kalyan Madanapalli

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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

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| **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

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| **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 |