Kalyan Madanapalli

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Education

Virginia Polytechnic Institute and State University

- Major: Computer Science (BS)

Skills

- **Languages**:
  - Java (proficient), Python (familiar), C (prior experience), C++ (prior experience)
- **Software, Frameworks, and Technologies**:
  - AWS technologies (Lambda, DynamoDB, SQS, etc), Spring, Hibernate, PostgreSQL, Redis, Maven, Kafka, Git

Work Experience

Amazon, Inc (SDE II)	• Building the central data lake for all Amazon's business data that rapidly grows in the petabyte scale • Wrote bulk data transfer services used by tens of thousands of data scientists, engineers, and analysts within Amazon • Maintain a data subscription service with over 200,000 subscriptions across 25,000 datasets within Amazon • Built data synchronization service that executes roughly 300,000 jobs daily syncing approximately 1500TB of data volume • Reduced initial data sync latency up to 95% for compacted datasets • Implemented customer data deletion within our core service in compliance with GDPR and other privacy laws • Utilized various AWS technologies like S3, Redshift, Glue, and Lambda to efficiently move data around at a large scale	July 2019 - Present
Solers, Inc (Software Developer)	• Worked with processing satellite and sensor data in the backend • 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 – June 2019
Solers, Inc (Software Co-op)	• 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 preexisting dashboards	May 2017 – December 2017
Undergrad CS Molecular Dynamics Research	• Worked with visual software like VMD (visual molecular dynamics), 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	June 2017 – August 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
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
TA Tips	• Mobile android app meant to connect students with students for tutoring each other