SHILPA KALISETTY
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EDUCATION

- **Virginia Commonwealth University – Richmond, VA** **Spring 2019 – Spring 2020**
  - *Master of Science, Computer Science, Engineering* | GPA: 3.4
- **Virginia Commonwealth University – Richmond, VA** **Fall 2014 – Spring 2018**
  - *Bachelor of Science, Computer Science, Engineering | GPA: 3.079*
- **John Randolph Tucker High School – Richmond, VA** **September 2010 – June 2014**
  - *Honor Roll, Chinese Club, French Club, Extra-curricular/Volunteer Activities | GPA: 3.998*
- **Swift Creek Middle School – Chesterfield, VA** **September 2007 – June 2010**

TECHNICAL SKILLS

- Python: Data Mining, Regularization Methods & Machine Learning Algorithms
- SQL Server, MySQL, Ajax: Database Development
- Swift, HTML, C#, CSS, Ajax: Mobile Programming/Web Development
- **Software Tools:** PyCharm CE, Spyder, Jupyter Notebook, AnacondaNavigator, Eclipse, IntelliJ IDEA, JUnit Testing, XCODE, MSSQL Server, Oracle, NetBeans, Android Studio, RStudio, Dr. Racket.
- **Cloud:** Microsoft Azure: Data Factory, Databricks

WORK EXPERIENCE

- **Associate Software Engineer- Cotiviti: Healthcare Analytics Company; Richmond, VA** **October 4, 2020 – Present**
  - Leverage Cotiviti built data ingestion platform to ingest data we receive from the clients and purpose it to our team's needs.
  - Worked with various healthcare datasets: rx claims and medical records, member demographics data and various other reference data sources to feed the suspecting models built to produce/enhance healthcare solutions.
  - Wrote high-quality, maintainable, robust code, often in SQL or Python to carry out the existing processes in the Risk Adjustment Project and HCC Suspecting.
  - Build Azure Data Factory pipelines to ingest client data and feed it as input to our models.
  - Work with QA team to validate outputs of data ingestion and meet the requirements in downstream processes.
  - Develop and actively maintain high quality, consistent documentation throughout all phases of work and give immediate access to these documentation to my team.
  - *Tools/Software technologies* used: Python, SQL, Microsoft Azure - Data Factory, Databricks, Storage Accounts, GitHub.

- **- Software Developer Intern - Cotiviti: Healthcare Analytics Company; Richmond, VA** **June 15, 2020 – Oct 2, 2020**
  - *Task:* Worked with client provider files in building python jobs to run data ingestion python scripts to ingest data into the database. Executed Machine Learning & Visualization pipelines in different environments (DEV, PROD) via Microsoft Data Factory. Also utilized Microsoft Azure Data Studio to trigger pipelines via Stored Procedures and also to perform sanity checks after ingesting client data. Loaded provider (data) files to SFTP using SFTP commands. Worked with extracting data from remote pdf data files and ingesting the data into the database.
  - *Tools:* Python, Microsoft Azure Data Factory, Databricks, Dockers

ACADEMIC PROJECTS --- VCU

- **Image Analysis: Early Detection of Cervical Cancer** **Spring 2020**
  - *Task*: Working with 500 real-life cancerous pap smears from patients with various forms of cervical cancer. First performed basic image operations/functionalities: noise additions, converting color to gray, histogram calculations/equalization, image quantization, filtering (linear + median). Then implemented image segmentation techniques to capture the cervical cancer cells. Final step: feature extraction and image classification using Machine Learning Algorithms to predict early stages of cervical cancer.

  No use of API, implemented own functionalities
  - *Tools*: Python: PyCharm CE
- **Regularization Methods for Machine Learning** **Fall 2019**
  - *Task*: deriving partial derivatives, updating weights, performing gradient descent for linear regression tasks, and performing parametric modeling (statistical analysis) on various datasets.
  - *Tools*: Python: PyCharm CE: Python's NumPy, TensorFlow, PyMC3 libraries
- **Advanced Natural Language Processing: SemEval Task 2020: Task 3** **Fall 2019**
  - *Task:* predicting the effect of context on word similarity by using Python's built-in tools for building word embedding models: elMO, word2vec, BeRT
  - *Tools:* Python: PyCharm CE
- **Data Analysis (Data Mining): Predicting and Detecting Epileptic Seizures on EEG Data** **Spring 2019**
  - *Task*: reading .edf data files & converting them into .csv. Used ML classifiers: Decision Trees, Logistic Regressor, Support Vector Machines, k-Nearest Neighbor algorithms to measure the performance of our models.
  - *Tools*: Python: PyCharm CE.
- **Web Development - Partners in Healthcare of Virginia (Capstone Project)** **Fall 2017**
  - *Task:* developed their existing website from scratch; responsible for automating the payment system through authorize .net and integrate it with Wild Apricot. Website's purpose: portal for HealthCare providers to connect to educational opportunities with Case managers, continuing educational opportunities, support of healthcare providers by posting open care positions.
  - *Tools:* Wild Apricot, authorize.net
- **SQL Database Development** **Fall 2017**
  - *Task:* designed a database system using SQL, created an ERD model using draw.io, translated the model into relational tables, identified functional dependencies and normalized the relations using BCNF/4NF. delivered a software/user-interface (web-based) application for accessing & manipulating the data.
  - *Tools:* Visual Studio, MSSQL Server, C-Sharp (C#), HTML5, AJAX
- **Android App Development** **Fall 2016**
  - *Task:* created an Android mobile application; a housing app for VCU students to rent/lease using Android Studio using Agile Development Methodologies and DevOP tools from Software Engineering Principles to deliver the finished mobile application.
  - *Tools:* Android Studio, Java

VOLUNTEER EXPERIENCE

- **Sri Sai Narayana Organization – Richmond, VA** **Summer 2015**
  - Assisted in the sales department and helped manage their website—adding events to calendars through the backend of their website.