# HARSHITH KAYAM

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### **EDUCATION**

## Georgia Institute of Technology, College of Computing

Atlanta, GA

B.S. in Computer Science (Intelligence & Information Internetworks), Honors Program Minor in Aerospace Engineering

Aug 2016 - Dec 2020 GPA: 3.4

Georgia Institute of Technology, College of Computing

Atlanta, GA

Candidate for M.S. in Computer Science (Machine Learning)

Admitted for Jan 2021

### **EXPERIENCE**

### HealthPals, Inc., Software Engineering Intern

Jun 2020 – Aug 2020

- Wrote APIs in Python using the Pandas framework to support programmatic access to several medical ontologies integrated as a new module to automate manual verification of patient data
- Implemented a unigram and sentence embedding script using word2vec and spaCy to determine medical terminology relevance and record similarity to flag erroneous entries
- Implemented an unsupervised clustering algorithm with the scikit-learn package for the entity resolution pipeline to identify key medical concepts in patient record databases

### LBA Ware, Software Development Intern

May 2019 – Aug 2019

- Developed a web application using ASP.NET Core and AngularJS to provide mortgage tracking analytics and sales data
- Implemented views in AngularJS to display data about mortgage lifecycles using Material Design with accessibility in mind
- Designed and developed middleware for querying and parsing data from backend microservices

# Vertically Integrated Project: Humor Genome, Undergraduate Researcher

Jan 2019 - May 2020

- Developed a computational linguistic tool using TensorFlow and NLTK to interpret the humor values of individual words
- Developed and integrated a phonotactical analysis script using NLTK to assess generated words in the English language
- Designed a categorization scheme using TensorFlow's word2vec library to map words to a 6-dimensional semantic space
- Tested computational tool output predictions against previous research findings on single-word humor ratings

#### **PROJECTS**

### **Indic Language Poem Generator**

Sept 2020

- Wrote a script using Python and Jupyter to read poems in the Telugu language and generate a new poem
- Used Markov chains and a transliteration framework to encode input text and generate novel verses

## **Codenames Game Player-Bot**

Aug 2020

- Implemented an agent for the word-game 'Codenames' in command line using word2vec to quantify word associations
- The agent assesses the given words on a grid to either guess the words or provide clues to other players on its team

#### **Donation Tracker App: Welfair**

Aug 2018 – Dec 2018

- Developed an Android and web application using Android Studio, JavaScript, and MVC architecture to track storage and distribution of donated items for non-profit organizations
- Implemented an in-app Google Maps UI feature to track NGO location and proximity using NodeJS and Google Maps API

#### Ticketing System | India Club at Georgia Tech

Dec 2017 - Apr 2020

- Developed and managed the official website regularly visited by 2000+ people for news and updates
- Analyzed sales and membership analytics, ticketing and event check-in using Flask Python and Heroku PostgreSQL

# **LEADERSHIP**

## India Club at Georgia Tech, President

Apr 2020 - Present

- Lead the oversee largest cultural organization on the Georgia Tech campus and the southeastern U.S.
- Serve a community of 1500+ through professional development initiatives, cultural events, and community service
- Manage a board of 60 members to plan, coordinate, and deliver successful events and services throughout the year

#### **SEDS at Georgia Tech,** Vice President of Membership & Marketing

Jan 2018 – Aug 2018

Students for the Exploration and Development of Space at Georgia Tech

• Networked with professionals in the space industry and attended conferences with SEDS team to partake in meaningful high-level discussion about the potential of off-world infrastructure

# **SKILLS**

**Programming:** Java • Python • C • C++ • JavaScript • MATLAB

Web Development: Angular JS • HighCharts JS • Canvas | NodeJS • Flask • ASP.NET Core | MySQL • SQL Server • PostgreSQL Software/OS: PyTorch • TensorFlow • Pandas • Spark • NLTK • spaCy • Word2Vec • ASP.NET Core • Git • Google BigQuery

Coursework: Data Structures • Design & Analysis of Algorithms • Systems & Networks • Natural Language Processing •

Intro. to Databases • Game AI • Intro. to Linguistics • Remote Sensing • Computer-Aided Design