480-370-7965 vinayannam97@gmail.com Tempe, Arizona, USA

# **SETU DURGESH VINAY ANNAM**

github.com/vinayannam linkedin.com/in/vinayannam vinayannam.github.io

#### **EDUCATION**

Master of Science (M.S.) in Computer Science | GPA: 3.89 / 4.0

---- Chata Hairanaita | Tanana Asiana HICA

Expected May 2021

Arizona State University | Tempe, Arizona, USA

Relevant Courses: Cloud Computing, Data Processing at Scale, Semantic Web & Data Mining, Mobile Computing, Software Security, AI, NLP

Bachelor of Technology (B.Tech.) in Computer Science | GPA: 8.93 / 10.0

May 2019

BML Munjal University | Gurgaon, Haryana, India

Relevant Courses: Distributed Systems, Big Data Analytics, Information Retrieval, Networks, Computer Vision, Human-Computer Interaction

#### **TECHNICAL SKILLS**

**Programming & DB:** Python, C#, Java, Javascript, C / C++, Swift, Shell / Bash, Matlab, PostgreSQL, MySQL, MongoDB Front/Backend Dev: Node.js, Vue.js, Express.js, .NET, HTML, CSS, PHP, jQuery Go, JSON, WebSockets, Django, Flask Git, Docker, Kubernetes, AWS, GCP, Hadoop, Apache Spark, Linux, Xcode, Android Studio

#### **EXPERIENCE**

# SSEBE, Arizona State University | Tempe, Arizona, USA

**Software Developer** 

01/2021 - Present

Converting Matlab code base into C#; Developing a ASP.NET webApp while incorporating complex algorithms from scholars

#### Advinow Medical Ltd. | Scottsdale, Arizona, USA

# **Software Engineering Intern**

06/2020 - 08/2020

- Developed a tool that extracts the symptoms from the articles; used cutting-edge BERT Pretrained models and lexical analysis
- Achieved an improvement in accuracy over 30% on the mapping of symptoms to diseases using hybrid approaches
- Built and integrated 8 extensible Python modules that facilitated autonomous extraction, annotation, and mapping
- Created microservices, data pipelines that collectively assisted doctors to increase the annotation pace from days to hours
- Worked on the Continuous Integration / Continuous Deployment pipeline by setting up proper Docker images in GitLab

# LTRC Lab, IIIT Hyderabad | Hyderabad, Telangana, India

# **Research Software Engineer Intern**

01/2019 - 05/2019

- Conducted research and published a paper under the title "Anaphora Resolution for Telugu Dialogues" S
- Leveraged neural networks and achieved a state of art for pronominal anaphora resolution in Telugu dialogue systems
- Analyzed the trade-off among the features at the semantic and morphological level; made a data-driven selection of features
- Developed and deployed an innovative web app that annotates the anaphora in up to 80 languages of human dialogues

#### Tech Mahindra | Bangalore, Karnataka, India

#### **Software Engineering Intern**

06/2017 - 07/2017

- Developed a scalable full-stack web dashboard application, for incident tracking using Vue.JS, Node.JS, MongoDB
- Built an Android app that actively notified the employers; impacted latest incidents by increasing the view rate to 100%
- Designed and implemented a RESTful API; used to fetch data to populate the D3.js charts in both web and android apps

# **PROJECTS**

# Geospatial Data Processing | Data Processing at Scale | Technologies Used: SparkSQL, Scala, SBT, GIS, Distributed storage

- Performed distributed computing that runs spatial queries on large GIS databases containing the real-time locations of users
- Developed SQL queries with points, lines, and polygons that apply within, contains, hot zone and hot cell analysis on locations

# Covid-19 Contact Tracer | Mobile Computing | Technologies Used: iOS, Swift, Xcode, Python, Flask

- Developed Covid-19 tracing iOS app; notifies the users of the potential risk of virus based on their contact & movement history
- Innovatively computed heart and respiration vitals using the time series data from core graphic (camera) & accelerometer

#### Glucose & Insulin Time Series Analysis | Data Mining | Technologies Used: Python, Pandas, Numpy, Scikit-learn, Tsfresh

- Extracted Features from large time-series data collected from subjects using a continuous glucose monitor sensor
- Used those features to estimate the mealtime (95% accuracy) & amount to artificially pump small bursts of insulin to balance

### BMU Blockchain | Cryptocurrency | Technologies Used: CLI, Node JS, MongoDB, Distributed Systems

- Developed a distributed real-time blockchain system with a web server module for transactions and a CLI for mining
- The blocks are secured by decentralization of transactions using peer to peer network and proof of work

# **LEADERSHIP EXPERIENCE**

# Graduate Services Assistant | CIDSE, Arizona State University | Tempe, Arizona, USA

08/2019 - 01/2021

- Graduate TA/grader for CSE 335 (iOS App Development) and CSE 205 (Objective oriented programming and data structures)
- Managed groups; guided and supported over 250 students by conducting office hours, providing feedback and solutions