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SETU DURGESH VINAY ANNAM

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EDUCATION

M.S. in Computer Science | GPA: 3.72 / 4.0   Expected May 2021
Arizona State University | Tempe, Arizona, **USA**
- **Relevant Courses:** Data Mining, Artificial Intelligence (AI), Data Processing at Scale, Natural Language Processing (NLP), Software Security

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, Java, Javascript, C/C++, Swift, Shell/Bash, Go, Scala, PostgreSQL, MySQL, MongoDB, MS SQL
Front/Backend Dev:	Vue.JS, Node.JS, Go, HTML, CSS, PHP, D3.JS, Django, Flask, JQuery, AJAX
Machine Learning:	PyTorch, Transformers, Tensorflow, Keras, Scikit-learn, SkImage, NumPy, Pandas, Matplotlib
Tools:	Git, Docker, Kubernetes, AWS, Spark / Hadoop, Linux / Ubuntu, OSX, Xcode, Android Studio, Sketch

INTERNSHIP EXPERIENCE

Advinow Medical Ltd. | Scottsdale, Arizona, **USA**
Software Development Engineer   06/2020 - 08/2020
- Developed a tool that extracts the symptoms from the articles; used cutting-edge **NLP deep learning** 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**
- Collaborated with a cross-disciplinary team of doctors and director; converted ideas and designs into technical specifications

LTRC Lab, IIIT Hyderabad | Hyderabad, Telangana, **India**
Research Software Engineer   01/2019 - 05/2019
- Conducted research and published a paper under the title *"Anaphora Resolution for Telugu Dialogues"* 🔗
- 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 Development Engineer   06/2017 - 07/2017
- Developed a scalable **full-stack web dashboard application**, for incident tracking using Vue.JS, Node.JS, MongoDB, and Nginx
- 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, Go
- 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 and amount to artificially pump small bursts of insulin into the body 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 - Present
- 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

Head Website & Application Developer | TEDxBMU | Gurgaon, Haryana, **India**   08/2016 - 05/2017
- Lead a team of 5 web designers and developers; innovated, built, and deployed a website for a TED event, *"Bridging the Gaps"*