AMARNATH RAJU VYSYARAJU

9450 Gilman Drive, #80071, San Diego, CA 92092
+1-858-232-0859 | amarnath.raju.v@gmail.com | **linkedin.com/in/amarnath-raju** | **github.com/amarnathraju**

EDUCATION:

University of California, San Diego   *Sep '17 - Expected Mar '19*
Master of Science, Computer Science (specializing in *Machine Learning and Data Science*)   GPA – 4.0/4.0
Related Coursework: *Recommender Systems & Web Mining, Principles of AI: Probabilistic Reasoning and Decision-Making, ML: Learning Algorithms, Data Mining & Analytics, Management of Large-scale Graph Data*

Indian Institute of Technology (IIT) – Kharagpur, India   *Jun '08 - May '12*
Bachelor of Technology in Computer Science & Engineering   GPA – 8.5/10.0

RELEVANT TECHNICAL SKILLS:

- Programming languages: Java, C, Python, MATLAB, HTML, JavaScript, CSS, Groovy, Shell scripting
- Tools/Libraries: NumPy, Pandas, Cypher/Neo4J, SQL, Apache Kafka, JUnit Testing, Maven, JSP, Hibernate

RELEVANT EXPERIENCE:

UC San Diego – Graduate Student Researcher   *Apr '18 - present*
- Leading the research for the PIRC-NET project (see below)
- Mentoring 3 undergraduate researchers in collecting crowdsourced data needed to train the ML models

UC San Diego – Graduate Teaching Assistant   *Sep '17 – Mar '18*
- **Courses:** Statistical methods, Intro. to Probability and Statistics for Bioinformatics
- Communicate and teach principles and applications of statistical models to nearly 60 undergraduate students

Goldman Sachs – FICC EWA Strategies Associate   *Oct '14 – Jul '17*
- Collaborated with a coworker in the ownership and design of a strategic software in Java that gets the EU FICC trading into the purview of MiFID II regulations
- Integrated new electronic channels to enable e-trading in Corporate Bonds and Credit Indices in the US and EU markets that helped develop the business and speed up the Credit trading process
- Enhanced the auto-pricer responsible for e-trading of more than 6,000 investment grade corporate bonds in the US markets using a GS specific scripting language SLang (similar to Python)
- Recruited and mentored new graduates and enabled them in becoming an integral part of the team by guiding them in the SDLC and explaining the business impact of the projects

BankBazaar.com – Software Developer   *Jun '12 – Sep '14*
- Integrated new products into the website, requiring changes in the code and flow of the loan application process that helped bring new business to the company
- Created a reporting system by parsing the logs on a cluster of machines and auto-analyzing them which led to the discovery of hidden bugs in the stack

RELEVANT PROJECTS:

PIRC-NET (pircnet.ucsd.edu)   *Apr '18 – present*
- Researching on building an HIV risk model based on **Tweets** for the population of San Diego County.
- Twitter analytics using NLP and Social media analysis by using the following technologies: MongoDB, Cypher/Neo4J, Python, Cloud application platforms

NLP on The CORE website (**thecore.ucsd.edu:** A forum for public health researchers)   *Oct '17 – present*
- Applying ML principles of topic-modeling and other NLP techniques to auto-recommend tags for new forum/resource posts on the website using Python libraries like: scikit-learn, Boto, Pandas, PyPDF2, python-docx

CypherImpl   *Apr '18 – Jun '18*
- Built a Java-based **Cypher** engine to parse & execute Cypher queries on a graph database built with PostgreSQL

RELEVANT RESEARCH PAPERS:

A Data Science Platform for Real-Time HIV-Risk Analysis on Twitter (Under Review)**,** *Proceedings of CHI 2019,* **Vysyaraju**, Mohan, Little and Weibel

CERTIFICATIONS:

- **Micro-MBA** from The Rady School of Management, 2018.
- **Coursera**: Machine Learning (Stanford University), Neural Networks and Deep Learning and Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization (deeplearning.ai)