Gautham Thirunavakkarasu, MS

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Experience driving strategic business decisions by developing production ready machine learning solutions that solve complex problems using customer data. Award-winning MS in Mechanical Engineering and Certified Scrum Master with experience in delivering projects that meet speed, accuracy, and quality standards; expert in Python and Machine Learning frameworks. Solid analytical skills for informing research/product roadmaps, plus a strong mathematical foundation. Published industry article in 2018. Passionate about continually improving technical skill set; currently pursuing TensorFlow Developer Certification.

Key Strengths:

Agile | Six Sigma | Engineering & Simulation Technologies | Exploratory Data Analysis | Computer Vision | Data Science | Feature Engineering | Machine Learning Research | Nature Language Processing | Sentiment Analysis | Problem-Solving Technical Skills:

Python (TensorFlow, Scikit-Learn, Pandas) | R Programming | AWS | Talend | Salesforce | Ansys | Icepak | Data Visualization Tools (ggplot2, pyplot, Seaborn) | Engineering Simulation Tools (CATIA V5, ANSYS, IcePak) | RStudio | Jupyter Notebook | MATLAB | git

Selected Professional Highlights

- Spearheaded AI and Data Analytics in Public Sector assessment world by implementing a POC on semantic and object detection of building plans with Mask R-CNN and TensorFlow; replacing a manual 2-3 week assessment review process to a 1 week valuation process, increasing assessment accuracy from 70 % up to 82%; conducted deep dive into data sources stored in large Excel sheets and physical image cards to define a problem statement for this DBT implementation; led 3 POC projects and a team of data engineers and analysts to understand and leverage this historical quantitative information.
- Earned Outstanding Teamwork & Public Service Award in December 2019 at Publicis Sapient after building a new approach to commercial and business trend valuation that increased assessment from 9.1% to as high as 14.7% in June 2020.; replaced user-driven input process with automated calculation framework, and collaborated with remote technical teams to validate calculations with historical assessment factors.
- Increased quality management for high-end products up to 2-3% in six months at Amazon by implementing quality predictive algorithm to identify a fraudulent product line; the predictive model managed to highlight inauthentic products and was enroute to being implemented into other product lines, such as sports merchandise.

Professional Experience

Publicis Sapient | San Francisco, CA | 01/20- Present

Associate Technology

Develop data-driven insights to identify process design improvements. Collaborate with stakeholders to scale development and develop predictive models to inform business decisions made by state mandated appraisers.

• Wrangle data from multiple sources (open government data organizations and systems) using Python and R to manipulate large datasets for insights; Leverage ETL tools, such as Talend, to set up data governance and data cleansing process.

ASTA CRS | San Mateo, CA | 01/19-01/20

Consultant

Assumed responsibility for improving business processes through solution implementation and collaboration among multi-competency teams of data engineers, solution architects, and business analysts.

Earlier Roles Include: Graduate Research Assistant, EMNSPC Lab; Product Analyst, Amazon; Engineering Intern, HAL.

Education & Certification

Master of Science in Mechanical Engineering – University of Texas at Arlington, Arlington, TX (May 2018)

Bachelor of Science in Mechanical Engineering – Visvesvaraya Technological University, Bangalore, India

Certification – Certified Scrum Master, Scrum Alliance (January 2020) | TensorFlow Developer Certification (In Progress)

Publication – Thirunavakkarasu, G and et al, "Air flow pattern and path flow simulation of airborne particulate contaminants in cold aisle containment high-density data center using air-side economization"; San Francisco, CA (Aug 2018); DOI: 10.1115/IPACK2018-8436