

# Gautham Thirunavakkarasu, MS

San Francisco, CA | 469.432.5281

[thi.gautham@outlook.com](mailto:thi.gautham@outlook.com) | [linked.com/in/th-gautham](https://www.linkedin.com/in/th-gautham) | <https://github.com/Gth1205> | [th-gautham.github.io](https://th-gautham.github.io)

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 | Project Execution | NLP | Engineering & Simulation Technologies | Exploratory Data Analysis | Computer Vision | Data Science | Machine Learning Research | Deep Learning | Image Augmentation | Tokenization | Problem-solving |

## Technical Skills:

Python (TensorFlow, Scikit-Learn, Pandas) | R Programming | AWS | Talend | Salesforce | Ansys | Icepak | Data Visualization Tools (ggplot2, pyplot, Seaborn) | Engineering Modeling 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 cut down to a 1 week valuation process, increasing valuation accuracy 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 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 valuation that increased assessment from 9.1% to as high as 14.7% in June 2020.; replaced user-driven input process with automated calculation, and collaborated with remote technical teams to validate calculation 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 certain 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 all, “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](https://doi.org/10.1115/IPACK2018-8436)