

# SREEDHAR RADHAKRISHNAN

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## EDUCATION

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### Carnegie Mellon University, Pittsburgh, PA

Master of Science in Information Networking | **Awarded CMU Graduate Scholarship**

May 2021

**Specialisation Areas:** Software Systems, Application Development and Machine Learning

### PES University, Bangalore, India

May 2018

Bachelor of Technology in Computer Science | **Awarded Academic Merit Scholarship**

**Coursework:** Data Structures, Algorithms, Operating Systems, Machine Learning, Web Development, Big Data

**Extracurricular:** Entrepreneurship Cell - Public Relations Team Lead | IEEE Student Body - Core Team Member

## SKILLS

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**Programming Languages:** Java, Python, Go, JavaScript, C, PL/SQL

**Web Technologies and Databases:** JavaScript, JQuery, Flask, Go kit, PHP, Vue.js, MySQL, PostgreSQL, DynamoDB

**Tools and Frameworks:** AWS, Docker, MapReduce Programming Model, TensorFlow, Apache Hadoop, Apache Hive, Git

## EXPERIENCE

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### GE

Bangalore, India

Software Development Engineer

August 2018 - June 2019

Software Engineer, Intern

January 2018 - June 2018

- Applied Publish-Subscribe Design Pattern and built a **Data Pipeline using Java, AWS Kinesis and AWS DynamoDB** to notify stakeholders regarding data changes and anomalies of over 5 million assets.
- Achieved a performance of monitoring data changes and **streaming 3000 records/second**.
- Implemented **Microservices using Go** for efficient retrieval of GE asset data from over 5 million records.
- Optimized PL/SQL stored procedures by identifying suitable indexes and eliminating redundant joins. Achieved **10x improvement in speed** in the production environment.

### University of Southern California, Viterbi School of Engineering

Los Angeles, CA

Visiting Research Scholar

June 2017 - July 2017

- Developed a **Cycle GAN model for image translation** of synthetic images to realistic urban scene images. Research use case was generation of training data for applications such as urban scene understanding.
- Presented and **published** at the 9<sup>th</sup> IEEE International Conference on Computing, Communication and Networking Technologies held at Indian Institute of Science (IISc). [ieeexplore.ieee.org/document/8493745](https://ieeexplore.ieee.org/document/8493745).

## PROJECTS

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### Car Design Studio With Generative Adversarial Networks

Tech Stack: Python, TensorFlow, Flask, HTML, CSS and JavaScript | Full Stack Development

January 2018 - May 2018

- Built a Conditional GAN driven Web Application for car designers to generate probable designs from a basic car sketch. Developed a paired dataset of over 200 car sketches and their corresponding images.
- Presented and published at the 2018 IFIP Cross Domain Conference for Machine Learning and Knowledge Extraction held at University of Hamburg, Germany. [springer.com/chapter/10.1007/978-3-319-99740-7\\_11](https://springer.com/chapter/10.1007/978-3-319-99740-7_11).

### Centralized Web Service for Multiple Social Networks

Tech Stack: Java, Jax-RS and Jersey | Backend Development

August 2017 - December 2017

- Implemented REST APIs to enable authorised users to broadcast and read messages from multiple social networks. The web service was consumed by a student team working on sentiment analysis of social media posts.

### Computing the Versatility of Cricket Athletes

Tech Stack: Python and R | Data Science

May 2016 - August 2016

- Modeled cross-format cricket athlete performance using Binary Matrix and computed versatility score of the athletes.
- Achieved 19% improvement in performance estimation by adding versatility score in the athlete evaluation formula.