U. Sethu Vinayagam

Indian Institute of Technology Madras

648, Tamiraparani, IIT Madras

9489175023



MOTIVATION

An ardent, and quick learner looking forward to contributing to the nation's growth through translational research and seeking opportunities to grow professionally.

EDUCATION

Program	Institution	%/CGPA	Year of completion
PhD in Civil Engg.	IIT Madras	9.56/10	Pursuing
B Tech in Civil Engg.	NIT Trichy	9.32/10	2019
XII	Kamala Niketan Montessori School (CBSE), Trichy	95.4%	2015
X	Mahatma Gandhi Centenary Vidyalaya, Trichy	10/10	2013

SCHOLASTIC ACHIEVEMENTS

- Ranked within the top 10% of the class (having a strength of 98) in Bachelor's degree 2018
- Selected for an exchange program, to complete the final year of Bachelor's degree in IIT Madras 2019
- Awarded B. Tech with Honors in Civil Engineering for securing 15 additional credits in advanced level courses with a CGPA of 9.2

SOFTWARE SKILLS

Programming languages: Python, C++

PROJECT

• UG Project (May 2019)

- Title: A Sequential Search Journey Planner System for the Indian Rail Network
- Description: This study developed a journey planner for travelers on the Indian Rail network to plan an optimal route between any given pair of origin and destination in the Indian Rail network based on several criteria such as no. of transfers, total travel time and waiting time between transfers

VISIBLE RESEARCH OUTPUT

- Sethu Vinayagam Udhayasekar, Manju Manohar Manjalavil, Ganesh Ambi Ramakrishnan, Aravinda Devaraj and Karthik K. Srinivasan. An integrated deep learning and regression modelling framework to predict transit demand, 7th TransitData international workshop (TransitData2021)
- Sethu Vinayagam Udhayasekar, Karthik K. Srinivasan and Bhargava Rama Chilukuri. An efficient graph reduction based label-setting heuristic to find K simple shortest paths on directed networks, 6th Conference of the Transportation Research Group of India (CTRG-2021)
- Sethu Vinayagam Udhayasekar, Manju Manohar Manjalavil, Ganesh Ambi Ramakrishnan, Aravinda Devaraj and Karthik K. Srinivasan. Application of deep learning models to forecast bus transit passenger demand, 6th Conference of the Transportation Research Group of India (CTRG-2021)

INTERNSHIP

• Undergone a two-month (May – July 2018) internship at Larsen & Toubro Construction on Enhancing Coordination between Site and Stores to Expedite Material Receipt and Vendor/Supplier Payment. It involved a detailed study of the company's existing material procurement processes, learning some of the process optimization tools and techniques.

TEACHING EXPERIENCE

Teaching Assistant, Transportation Network Analysis

(Jan - May 2020)

Indian Institute of Technology Madras

- Conducted lecture on data structures for 15-20 undergraduates and postgraduates
- Conducted tutorial sessions on different network algorithms

Teaching Assistant, Probability and Statistics Rajalakshmi Engineering College, Chennai

(Sep 2021)

• Conducted lectures on the basics of probability for undergraduates

EXTRACURRICULAR ACTIVITIES

- Positions of Responsibility
 - Event Manager of Topographya event of Pragyan '18 (The International Techno-Management Festival of NIT-Trichy)
 - Part of the Publicity Team of Moments '16 (A National Level Civil Engineering Technical Symposium)
- Others:
 - NSS Member for the year 2015-2016 during which we organized saplings plantation in our college campus and made a camp in a nearby village to spread awareness about health and hygiene

PERSONAL DETAILS

Date of Birth 16 June 1998 Languages Known English, Tamil

Correspondence Address 402, Kanagalakshmi Nagar, Vayalur Road, Trichy, TN, India - 620102

Marital Status Single

REFERENCES

Dr. Karthik K. Srinivasan, Professor Department of Civil Engineering Indian Institute of Technology Madras +91-44-22574282, karthikks@iitm.ac.in

Dr. Bhargava Rama Chilukuri, Assistant Professor Department of Civil Engineering Indian Institute of Technology Madras +91-44-22574270, bhargava@iitm.ac.in

DECLARATION

I hereby declare that all the details furnished above are true to the best of my knowledge