

Indukala Naladala

☎ +1-470-399-3044 | ✉ indu.naladala@gatech.edu | 🏠 indu98.github.io | 🌐 indu98

Education

Georgia Institute of Technology, College of Computing

Atlanta, GA

Master of Science in Computer Science

Aug. 2019 - Dec. 2020

- Courses: Algorithms | Machine Learning for Trading | Networks | Software Engineering | Enterprise Computing
- Graduate Teaching Assistant for User Interface Design (Fall '19), Design and Analysis of Algorithms (Spring '20)

National Institute of Technology Karnataka (NITK)

Surathkal, India

Bachelor of Technology in Computer Science and Engineering, GPA: 9.5/10

Jul. 2015 - Jun. 2019

- Courses: Soft Computing | Data Warehousing & Mining | Information Retrieval | Advanced Data Structures | Cloud Computing | Database Management Systems | Operating Systems | Network Security | Cryptography | Compilers
- J. N. Tata Fellow, CSAB Scholar, INSPIRE Fellow, NTSE Scholar (among 1.3 million candidates) - Govt. of India

Experience

INRIA, France & NICT, Japan | Research Intern

Sophia Antipolis, France

Pull-based Mobile Video Streaming | Guide: Prof. Thierry Turletti

Aug. 2018 - Dec. 2018

- Proposed a name-based mobile streaming scheme that allows efficient video content delivery by exploiting a smart pulling mechanism designed for information-centric networks (**accepted at IEEE CCNC 2020**)
- Leveraged in-network caching and coding to enable fast packet loss recovery and high QoE levels

INRIA, France | Summer Intern

Sophia Antipolis, France

Integration of R2lab testbed with ns-3 | Guide: Prof. Walid Dabbous

May. 2018 - Jul. 2018

- Interfaced R2lab testbed with ns-3 simulator to help researchers in emulating wireless/wired network topologies
- Wrote nepi-ng scripts to automate route configuration, image loading and packet capturing in emulation clients

Samsung R&D Institute, India | Summer Intern

Bangalore, India

Simulation of DRAM Controller | Guide: Dr. Praveen Kondugari

May. 2017 - Jul. 2017

- Analyzed gem5 framework and simulated high-level event-based DRAM Controller using SystemC and TLM 2.0
- Evaluated performance of multi-processor system by capturing interactions b/w DRAM Controller, CPUs, GPUs, I/O

Skills

Languages/Libraries C/C++ (Most Proficient), Python, Java, MATLAB, Django, NumPy, SciPy, pandas, OpenCV

Tools/Frameworks SQL, PHP, HTML/CSS, Keras, AWS, Heroku, Git, \LaTeX , gem5, Verilog, ns-3

Key Projects

Ship Lifetime Estimation using Random Forest (*published in ICACCI 2018*)

Used histogram comparison to determine corrosion damage and estimated the lifetime of ship parts. Segmented post corrosion image and classified segments as uncorroded/corroded using Random Forest with 92% accuracy.

Textile Waste Damage Analysis using ANN

Performed feature selection using Fuzzy Sets; designed Artificial Neural Network (ANN) using Predictive Regression Model (optimized using Particle Swarm Optimization) to predict amount of textile waste that will be generated.

Online Research Internship Portal

Developed a Django app to match students' research interests with mentors' projects (regret minimization framework).

Guest House Booking System

Developed an Android app which allows students to book rooms in guest house; deployed to AWS.

Document Clustering using PSO

Used Particle Swarm Optimization (PSO) to select features prior to k-means document clustering and compared performance with genetic and harmony search feature selection.

Dimensionality Reduction using Linear Discriminant Analysis (LDA)

Compared performance of LDA & Principal Component Analysis (PCA) by using both individually prior to classification.