Venkat Sai Suman Lamba Karanam

Curriculum Vitae

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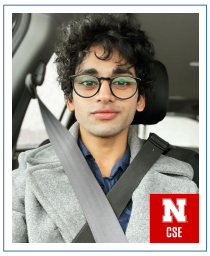
My Webpage
Github



Education

2017–present **PhD, Computer Science & Engineering**, *University of Nebraska-Lincoln*, Lincoln, NE.
Large Data Transfers, Optimization in the Networks, Realtime Machine Learning in the Networks, Software-defined Networks, Distributed Computing

2013–2015 : **Master of Science, Computer Science & Engineering**, *University of Nebraska-Lincoln*, Lincoln, NE.
Distributed and Cluster Computing

2009–2013 : **Bachelor of Technology, Information Technology**, *Jawaharlal Nehru Technological University*, Hyderabad, India.

Publications

2023 Byrav Karanam, Venkat Sai Suman Lamba andRamamurthy. Dycrono: Dynamic cross-layer network orchestration and real-time deep learning-based network load prediction (ACCEPTED). In *2023 Optical Network and Design and Modelling*, pages 1–6. ONDM, 2023.

2022 Sachin Sharma, Saish Urumkar, Gianluca Fontanesi, Venkat Sai Suman Lamba Karanam, Boyang Hu, Byrav Ramamurthy, and Avishek Nag. Towards emulation of intelligent iot networks on eu-us testbeds. In *2022 International Seminar on Intelligent Technology and Its Applications (ISITIA)*, pages 484–489. IEEE, 2022.

2022 Mohammad MR Lunar, Jianxin Sun, John Wensowitch, Michael Fay, Halit Bugra Tulay, Venkat Sai Suman Lamba Karanam, Brian Qiu, Deepak Nadig, Garhan Attebury, Hongfeng Yu, et al. Onelnk: One link to rule them all: Web-based wireless experimentation for multi-vendor remotely accessible indoor/outdoor testbeds. In *Proceedings of the 15th ACM Workshop on Wireless Network Testbeds, Experimental evaluation & CHaracterization*, pages 85–92, 2022.

2021 Baofeng Zhou, Venkat Sai Suman Lamba Karanam, and Mehmet C Vuran. Impacts of soil and antenna characteristics on lora in internet of underground things. In *2021 IEEE Global Communications Conference (GLOBECOM)*, pages 1–6. IEEE, 2021.

2019 Sai Suman. Scheduling and prefetching in hadoop with block access pattern awareness and global memory sharing with load balancing scheme. 2019.

Research Experience

Adobe Systems, CA

Summer-Fall, 2021 ***Graduate Researcher***.
Just-in-time (JIT) streaming optimization of data transfers for large-scale machine learning workloads.

Spring, 2016 ***Graduate Researcher***.
Hardware Isolation-based Security measures using Intel SGX and ARM TrustZone technologies.

UNL, NE

2019 – present ***Research Assistant***.
Research in network optimization, software-defined networks (SDN), large data transfers, and machine learning.

Summer 2021 & 2022 ***Graduate Researcher***.
Developed frontend and backend applications for automatic irrigation project with Institute of Agriculture and Natural Resources (IANR).

Fellowships & Awards

2022 ***SciAuth Fellowship*** with SciAuth program funded by NSF, as a PhD Student Fellow.

2017 **Graduate Teaching Award**, School of Computing, UNL.

2015 **Award for Contribution to Students**, Teaching Council & Parent's choice, UNL.

Teaching

2022 **Guest Lecturer** for **CSCE862: Advanced Topics in Networks: Block Chain**

2017-2018 **Instructor of Record** for **CSCE:236: Embedded Systems Applications,** School of Computing, UNL

2015 **Guest Lecturer** for **CSCE863: Communication Networks**

Technical skills

Programming Languages & Libraries: Python, PyTorch, keras, C++, Advanced JAVA, Javascript, Networking in Linux/Unix, Software-defined Networks (SDN)

Hardware Technologies: Universal Software Radio Peripheral (USRP), Embedded Devices (IoT)

Position of Responsibility

2015 **Judge**, *ACM Regional Programming Contest*, Lincoln.

2020 **Volunteer**, *International Conference on Computer Communications*.

2019 **Graduate Curriculum Representative**, *UNL*, School of Computing.

Teaching Assistantship

2022 - 2021 **CSCE863: Advanced Topics in Networks: Block Chain**, UNL.

2022 - 2021 : **CSCE952: Advanced Computer Networks**, UNL.

Others: **CSCE877: Cryptography Techniques, CSCE851: Operating Systems Principles, CSCE863: Communication Networks**, UNL.

Referees

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