Shravya Kaudki Srinivas

skaudkis@andrew.cmu.edu | 412-628-5489
https://github.com/shravya-ks
https://linkedin.com/in/shravya-kaudki-srinivas

EDUCATION

Carnegie Mellon University
MASTERS IN INFORMATION NETWORKING
Expected May 2019 | Pittsburgh, PA
COURSES TO BE TAKEN IN FALL 2017

- 15-513 Introduction to Computer Systems
- 18-349 Introduction to Embedded Systems
- 10-601 Introduction to Machine Learning
- 14-848 Cloud Infrastructure and Applications

National Institute of Technology Karnataka
BACHELORS IN COMPUTER ENGINEERING
May 2017 | GPA: 9.35/10.0 | Surathkal, India

EXPERIENCE

Google Summer of Code | OPEN SOURCE
CONTRIBUTOR FOR NS-3
June 2017 – Aug 2017 | Remote, Bengaluru, India

- Created a framework for TCP Prague Simulations in ns-3
- Implemented Data Centre TCP, DualQueuePI2 AQM and Data Centre Topolgy helpers in ns-3 along with unit tests
- https://gsoc17-tcp-prague.github.io

ns-3 Summer of Code | OPEN SOURCE
CONTRIBUTOR FOR NS-3
August 2016 – October 2016 | Remote, Bengaluru, India

- Implemented RFC 3168 (The Addition Of ECN to IP) in ns-3 to provide ECN support for ns-3 queue-discs
- The code contributed has been merged in latest version of ns-3
- https://www.nsnam.org/wiki/ECN_in_ns-3

MITACS GLOBALINK RESEARCH INTERN
May 2016 - July 2016 | University Of Alberta, Edmonton, Canada

- Examined the problem of localisation in mobile underwater sensor networks governed by meandering jet mobility model
- Implemented mathematical framework in C++ for solving meandering jet mobility model using differential calculus in order to compute the final positions of underwater sensor nodes deployed
- Designed and implemented an algorithm in C++ for nodes localization and extended it for grid and clustering algorithms with monte-carlo sampling for probabilistic localisation of nodes
- Developed an animator in Java for simulation of meandering jet mobility model

SKILLS

Programming: C • C++ • Java • Python • UNIX shell • ns-3 • LaTeX • HTML • CSS

PROJECTS

Bachelor's Thesis | AQM EVALUATION SUITE FOR NS-3

- Implemented RFC 7928 (AQM Evaluation Suite) in ns-3, a fully automated ns-3 based suite to evaluate different AQMs (https://aqm-eval-suite.github.io/)

Parallel Bake | PARALLELISATION OF BAKE

- Implementated an architecture for parallel resolution of dependencies in bake project using basic fork system call in Python

E-Judicial portal | ONLINE PORTAL FOR THE INDIAN JUDICIAL SYSTEM

- Aimed at digitalizing elements of the judicial system, Features include finding and booking advocates, filing and checking case, using HTML, CSS, PHP, MySQL & Bootstrap

CSPRNG | RANDOMNESS FROM ENVIRONMENTAL ENTROPY

- Generation of random number using entropy collected from noise and light conditions as seed for a Blum Blum Shub implementation in Java.

PUBLICATIONS

- [1] Ankit Deepak , **Shravya K.S.** , and Mohit P. Tahiliani. "Design and Implementation of AQM Evaluation Suite for ns-3." WNS3 '17 Proceedings of the Workshop on ns-3: 87-94.
- [2] Prashasthi Mavin, **Shravya K.S.** , and Ankit Deepak. "Image Processing Approach to Diagnose Eye Diseases." ACIIDS 2017: Intelligent Information and Database Systems: 245-254.
- [3] **Shravya K.S.** , Smriti Murali and Mohit P. Tahiliani. "Implementation and Evaluation of Proportional Integral Controller Enhanced (PIE) Algorithm in ns-3" WNS3 '16 Proceedings of the Workshop on ns-3: 9-16.

AWARDS AND HONORS

- **Prabhu and Poonam Goel Fellowship** , 2017 by CMU INI, awarded to 1 out of 51 in MSIN
- **MITACS Globalink** Undergraduate Research Fellowship, 2016 by MITACS
- **Indian Academy of Sciences** Summer Research Fellowship, 2015 by IISc