Jaman Arora

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https://github.com/r0ck3r008

ABOUT ME

I am a Masters student with 4+ years of experience in GNU/Linux and systems level programming. Being a passionate developer, I have keen interest in all things Databases, Networking, Operating Systems and Cybersecurity. From peer to peer overlay DHT networks to concurrent RDBMS, I have built systems with maintainable and extensible code-bases and look forward to working with people who love to take on biggest engineering challenges.

⇔ SKILLS

Programming/Scripting

 \mathbf{C} Go C++**Python** Rust *** Popular Frameworks **Docker** Git

Platforms

GNU/Linux **** Android **

EDUCATION

University Of Florida Gainesville, USA

August 2019 - April 2021

- M.S. in Computer and Information Sciences, GPA 3.54/4.00
- Highlighted Coursework:

Database System Implementation, Distributed Operating Systems, Blockchain, Penetration Testing and Ethical Hacking, Advanced Data Structures, Malware Reverse Engineering

SRM Institute Of Science and Technology Chennai, India

July 2015 - May 2019

- B.E. in Computer Science and Engineering, CGPA 8.3/10.0
- Highlighted Coursework:

Network Programming, Database Management Systems, Operating Systems

PUBLICATIONS

A Relay for A SDN Controller

February 2020

- Indian Patent Application No. 202041008146 dated March 06, 2020
- With co-inventors Ms. Vaishnavi Moorthy, Dr. Revathi Venkataraman, Nikhil Gupta

An Attendance System and Method Thereof

December 2018

- Indian Patent Office Journal dated July 27, 2018, page No. 28230
- With co-inventors Ms. M. Gayathri, Dr. C. Malathy and Rakshit Jain

</> PROJECTS

KademGo **Ongoing**

- Go, Kademlia, Distributed Hash Tables
- Vanilla implementation of Kademlia DHT protocol in form of a Go Library

DFS: A Database Engine Written from Scratch

April 2020

https://github.com/r0ck3r008/kademgo

https://github.com/r0ck3r008/database-from-scratch

https://github.com/r0ck3r008/arch-perf-benchmark

https://github.com/r0ck3r008/twitter-engine

- Linux, C++, Google Test, flex/vacc
- Database engine tested with processing 1GB or 7,000,000+ records
- · Complete with aggregate, join and select functionalities

A Performance Benchmark of Image Encryption Algorithms

December 2019

- C, Python, Image Encryption, RISC-V, ARM, x86
- Compares simulated RISC-V, ARM and x86 ISA • Image encryption benchmark framework for RC4, Chirikov and Vigenere algorithms

Twitter Engine for Highly Concurrent Systems

December 2019

- Elixir, Phoenix Framework, Websockets
- Distributed and Fault tolerant Twitter Engine tested with 100,000 simultaneous user processes

Tapestry: A P2P Distributed Hash Table Network

November 2019

• Elixir, Tapestry, Distributed Hash Tables

- https://github.com/r0ck3r008/tapestry_p2p
- Resilient P2P network capable of connecting 2,000+ clients with reliable resource sharing
- Reliable resource sharing even with 20% failed nodes