Naman Arora

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ABOUT ME

I am a masters student with special focus on 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

C	●●●●●	**Go**	●●●○○
C++	●●●●○		
Python	●●●○○	**Rust**	●●○○○

Popular Frameworks

Docker	●●●●○	**Ghidra**	●●●○○
Git	●●●●○	**Radare2**	●●●○○

Platforms

GNU/Linux	●●●●●	**Windows**	●●●○○
Android	●●○○○		

EDUCATION

University Of Florida *Gainesville, USA* — ***August 2019 - April 2021***

- **Master of Science** in Computer and Information Sciences, **GPA 3.54/4.00**
- **Relevent Coursework:** "Database System Implementation", "Distributed Operating Systems", "Ethical Hacking and Penetration Testing", "Malware Reverse Engineering"

SRM Institute Of Science and Technology *Chennai, India* — ***July 2015 - May 2019***

- **Bachelor of Technology** in Computer Science and Engineering, **CGPA 8.3/10.0**
- **Relevant 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
- Realtime communication between controllers within distributed SDN

An Attendance System and Method Thereof — ***December 2018***

- Indian Patent Office Journal dated July 27, 2018, page No. 28230
- System for attendance using facial recognition

</> PROJECTS

Malware Analysis — ***Ongoing***

- *Ghidra, x64DBG, Python, Radare2* https://github.com/r0ck3r008/malware-analysis
- Malware sample analysis reports with Ghidra/Rizin workspaces and memory dumps
- Currently analyzed sample families: ***Carberp (2008) and AveMariaRAT (2020)***

DFS: A Database Engine Written from Scratch — ***April 2020***

- *Linux, C++, Google Test, flex/yacc* https://github.com/r0ck3r008/database-from-scratch
- 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* https://github.com/r0ck3r008/arch-perf-benchmark
- 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* https://github.com/r0ck3r008/twitter-engine
- 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**