Iacopo Pacini

Computer Engineering student(M. Sc.)

▸ Born in 03/01/1996

▸ italian

▸ unmarried

Education

10/2015 - 02/2020

Computer Engineering (B.Sc.)

University of Pisa

Bachelor's thesis: "A complete PBC library benchmark on Zolertia Remote device"(93/110).

02/2020 - Today

Computer Engineering- Curriculum "Cybersecurity" (M.Sc.)

University of Pisa

GPA: ~25.2/30

Interests

▸ Flautist

▸ Cooking

▸ Gardening

Biography

My name is Iacopo Pacini, I was born in Italy in 1996 and i am currently attending the M.Sc. in Computer Engineering at the University Of Pisa. I have been a computer enthusiast since when I was 12, when my parents bought our first personal computer. I remember spending hours clicking on every icon i found just to discover what action they would trigger. Growing up I realized that the IT field is vast and full of exciting topics, so I enrolled the B.Sc. of Computer Engineering at the University Of Pisa where four years later i obtained the degree. While studying i particularly developed a passion for networking protocols,electronics and the Linux OS.

Work experience

Family business | casual labor   **.... - today**
Domestic lightning shop
Tuscany

My job consisted in setting-up the point of sales, the store and mostly dealing directly with customers.

Technical skills

Programming skills

- **C/C++**: strong basis on algorithm and data structure, on socket programming and secure coding(implementation of a secure version of the "4 In A Row" game)

- **Database Management System**: strong background on relational, graph and document DBs architecture.
    - Hands-on project on **Mysql** server queries(including sub-queries, stored procedures, triggers, event and stored functions) and analytics.
    - Ongoing university project on **Java + MongoDB + Neo4J** application implementing a simple programming forum.

- **Java**:basic knowledge of JRE, Java Collections, Garbage Collection, Java Threads, Executor framework, memory consistency model and database drivers.

- **Python**:basic knowledge of Python for automated scripting, data analysis(Numpy, Pandas) and visualization(Matplotlib) and binary code injection.

- **Android**: basic knowledge of Android programming acquired during the development of "CatchAMole" project

Computer Architecture
Basic knowledge of Intel/Amd instruction set architecture. Familiarity with cache architecture, super-scalar processors, virtual memory and speculative execution.

Electronics
solid basis on transistor circuit, Operational amplifier, logic gates and sequential logic. Hands-on projects on the implementation digital integrated circuits design over FPGA in both VHDL and SystemVerilog languages(AES S-Box based stream cipher, Secure Sequence Recognizer)

Networking
Familiarity with the TCP/IP architecture, IPV4, Switched Ethernet, transport layer protocols(TCP/UDP)and routing protocols(RIP,OSPF)

Contact

github.com/IacPc

linkedin.com/iacopo_pacini

iac.pacini@gmail.com

Simulations and Performance Analysis
Basic Knowledge of the principles of discrete event simulation: events, event queues, random number generation. Basic notion of analytical system modeling and capacity planning. Structure of a simulator software.
Hands-on experiments with the OMNET++ framework("Faculty bar")

CyberSecurity
Familiarity with the most popular techniques for encryption, secure authentication and digital signature(AES, RSA, MACs, ElGamal, ECC, SSL). Basic skills on web security,Binary exploitation(ROP, Format strings, buffer overflow, GOT exploitation, heap overflow), VM escaping and kernel exploitation.

Linux System Administration
Basic knowledge of:

- File Systems Hierarchy;

- Bash Commands(GREP, AWK,SED);

- Handling of file, directories;

- Modern Linux security: Apparmor, capabilities, namespaces, control groups;

22nd August 2021

Iacopo Pacini