europass Curriculum vitae

PERSONAL INFORMATION

Antonio Le Caldare

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https://github.com/psoftware/ www.lecaldare.com

Gender Male | Date of birth ******** | Nationality Italian

Contact me for the full uncensored version

WORK EXPERIENCE

July 2021 – now — Software Engineer - Alkeria Srl

Navacchio, Pisa, Italy

High Speed Industrial Grade USB3 Camera Manifacturer

I am responsible for the camera software standardization process following the GenICam standard. I am also responsible for:

- mantaining and developing drivers, SDKs and internal tools
- assisting international clients
- supervising new workers

May 2015 – June 2019 — System Administrator - Progetto Neco

Via San Nicola 48, 85058 Vietri di Potenza (PZ), Italy

Local no-profit WISP serving over 200 clients

My job is to design software to simplify configuration of all network devices and for monitoring purposes. Systems are based on OpenWRT and Linux OSes.

May 2017 – June 2017 — Internship - Progetto Neco

Via San Nicola 48, 85058 Vietri di Potenza (PZ), Italy

Project: Design and Implementation of a network monitor map for a mesh wireless network

All Summers 2011 – 2013 — Internship - ********

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Local WISP serving over 1000 clients

- monitoring and maintenance of network APs and backbone (Mikrotik based)
- configuring and monitoring network link devices (mostly Ubiquiti based)

EDUCATION AND PROJECTS

September 2017 – June 2021 — Master's Degree in Computer Engineering, Computer System and Networks

Università of Pisa, Italy

Expected grade 110L/110

Project KVM EndlessFault - A simple KVM Virtual Machine Monitor

Course Virtualization

Source Code https://github.com/psoftware/kvm-endlessfault

A Virtual Machine Monitor written in C/C++, using KVM APIs. Features:

- simple Keyboard, Video card (text mode) and Serial port emulation
- ELF loading support
- gdb support (built-in gdbstub)

Project: Performance Evaluation of a Round-Robin Scheduler in a CQI based Cellular Network

Course: Performance Evaluation of Computer Systems and Networks

Source code: https://github.com/psoftware/RoundRobin-Cellular-Network

Cellular Network model written in C++ using the Omnetpp framework.
Two sub policies are compared according to throughput and response time.
It is included a detailed analysis of model results and model validation (using R Language).

Project: Secure File Access Protocol

Course: Cybersecurity

Source code: https://github.com/psoftware/secure-fap

Client/Server protocol for secure file transfer. Features:

- C++ implementation using OpenSSL, with remote client authentication
- immunity to replay attacks and low protocol malleability using formal verification

EDUCATION AND PROJECTS

September 2014 – February 2018

Bachelor's Degree in Computer Engineering

Università of Pisa, Italy

Grade: 109/110

Thesis Project: Design and Development of a windowing system in a multiprogrammed OS

Thesis source code: https://github.com/psoftware/ce-kernel-graphics

A Graphic System, built from scratch with C++, without using 2D graphic card acceleration:

- 2D Graphic library, with optimized drawing algorithm, 32BPP depth and transparency support
- Window manager, with support for mouse and keyboard events + Userspace libraries

Project: MFQ Process Scheduler

Course: Computer Architecture/Operating Systems

Source code: https://github.com/psoftware/ce-kernel-graphics/tree/sched-mfq

A Multilevel Feedback Queue Scheduler implementation for the OS provided by the course professor. It is included a process grapher to visualize process switches.

EDUCATION AND PROJECTS

September 2009 – July 2014

High School Diploma - Electronic Engineering and Automation

Grade: 100/100

PERSONAL SKILLS

Programming Languages:

- C and C++ (∼70k LOC), Assembly x86/x86_64 (∼1k LOC)
- Java (∼10k LOC)

Other skills:

- advanced use of git, use of Github and Gitea as collaborating tools. Experience with SVN
- experience with both Linux and Windows platforms

Languages: Mother tongue: Italian. English: Intermediate level