

Phone number: +1 [REDACTED]

Home Address [REDACTED]

Born in Milazzo (Italy), 07/16/1989

Education:

July 2007

High school diploma, grade 100/100

October 2010

Bachelor of Science in Engineering in Computer Science, University "Sapienza" of Rome.

Specialization in Algorithms and Data structures

Final grade 110/110

January 2013

Master of Science in Engineering in Computer Science, University "Sapienza" of Rome.

Specialization in Distributed systems and computer Architectures

Final grade 110/110 with honors

Skills:

Programming languages: C, Java, Python, C++, Bash

Hardware Architectures: Intel x86, AMD x86-64

Operating Systems: FreeBSD, Linux, Solaris, Windows

Tools: GDB, Eclipse, NetBeans, Git, Subversion

DBMS: MongoDB, MySQL

Markup Languages: Latex

Modeling Languages: UML, ERM

Languages: native speaker of Italian, fluent both in written and spoken English

Work Experiences:

November 2013-now

MongoDB inc.

Part of the MongoDB performance team. Responsible for discovering, analyzing and fixing performance problems in the MongoDB server. Also worked on a microbenchmark suite aimed to find regressions in the MongoDB server, and was involved in the QA process for the MongoDB 2.6 release.

September 2012- October 2013

iXsystems inc.

Member of the platform team responsible for maintaining iXsystems internal FreeBSD-based product (TrueNAS). Some projects:

- Implemented a userland lock profiler
- Various locking stability fixes in the VFS layer (SMBFS, ZFS)
- Improved scalability of ZFS ARC modifying memory allocation strategy
- Prototyped a new implementation for kernel spinlocks based on MCS

May 2012-August 2012

Summer of Code student, Google Inc.

I worked on the callout(9) facility subsystem in the FreeBSD kernel, in order to support high-resolution events and reducing the number of useless wakeups, with a huge impact on power consumption. The work was merged in FreeBSD 10 as per March 3rd 2013. A paper, presented at AsiaBSDCon 2013, that describes the work done more in detail can be found here: http://people.freebsd.org/~davide/asia/callout_paper.pdf

January 2012-present

Developer, The FreeBSD project

Worked in various areas of the kernel, most notably timekeeping infrastructure (callout(9)), performance monitoring events framework (hwpmc(4)) (adding support for new architectures, namely Sandy Bridge), userspace locking (umtx) (prototyping a mechanism for adaptive spinning), other than random bugfixing. A list my commits can be found here: <http://freshbsd.org/search?q=committer%3Adavide>

Awards:

February 2012:

Scholarship for Academic Excellence (the so called "Excellence Path") for particularly deserving students in terms of average grade, exams passed and age, released by "Sapienza" University of Rome.

July 2012:

Scholarship for outstanding results in Computer Engineering, released by Accenture, a global management consulting, technology service and outsourcing company.