Manuel C. Freitas

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Employment

Researcher HASLab/INESC TEC

Oct 2017 – Dec 2017

with IBM Haifa collaboration

DEDISbench: A Benchmark for Deduplicated Storage Systems, with realistic content generation.

- Currently changing the architecture to use threads instead of processes and explicit sharedmem.
- Weighed in on the implementation of a fault injection module.
- Added a module to facilitate the viewing of benchmark data results with plots.
- Technologies: C, gnuplot, Linux.

Researcher HASLab/INESC TEC

Jul 2017 - Sept 2017

SafeFS: A modular architecture for secure user-space file systems. Part of the SafeCloud Project funded by the European Commission.

- Learned a lot about FUSE and File Systems in general.
- Technologies: C, Fuse, Filebench, Linux.

Education

Braga, Portugal Universidade do Minho

Sep 2014 – Jul 2019

- M.S.E. (Integrated Master) in Software Engineering. Current average, 16/20 values.
- Currently on the 4th year, mastering in Distributed Systems and Application Engineering.
- Main skills acquired so far: Algorithms and data structures; Computer Architecture; Operating Systems; Object Oriented Programming; Artificial Inteligence; Logic programming; Databases; Distributed Systems; Functional Programming; Compilers.
- Skills obtained by july 2018: Systems Administration; Cryptography; WebServices; Design Patterns; Interactive Systems; Natural Language Processing; Ambient Intelligence.

Technical Experience

Projects

- BasicNN (ongoing): A simple implementation of neural nets to solidify my knowledge on the matter. C.
- PeerKnowledge (ongoing): A peer-to-peer system for course related file sharing. Java, Python.
- Mnham Mnham (2017): A course project, mobile app that recomends the best and closest place to eat a specific food you desire. C#.NET, SQL.
- **Graphics Engine** (2017): Generates a graphic scene based on geometric directives specified in XML files. OpenGL, C++, XML
- Reverse Proxy Server (2017): Proxy server that based on various metrics, distributes incoming requests to connected backend servers. Java.
- Very Simple Programming Language (2017): A very simple, compiled, integer based programming language. C, Flex, Yacc.
- Compressor (2016): A simple file compressor using shannon-fano encoding. Python

Additional Experience

- MIUP Maratona Inter-Universitaria de Programação (2017): First time participating in a national programming competition.
- Google Hash Code (2017): Participated for the first time with three more friends. Ranked 1709.
- Pixels Camp 2017: Three days of learning, networking and hacking.
- Buffalo University's ops-class Developing operating system core functionality like job scheduling and synchronization.

Languages and Technologies

- C++; C; Java; C#.NET; SOL; Python; Perl; Erlang; Haskell; Prolog; JavaScrpit.
- NetBeans; IntelliJ; Advanced Linux and bash user; FUSE; Flex; Yacc; Gawk.