Nicolás Meseguer Iborra

Portfolio: nicolasmeseguer.github.io Github: github.com/NicolasMeseguer

EDUCATION

Universidad de Murcia

Murcia, Spain

Master of Science - New Technologies in Computer Science; GPA: 9.24

September 2021 - June 2022

Email: n.mesegueriborra@um.es

Courses: High Performance Computing and Architecture, Microarchitecture of the processing cores, Parallel programming standards, Compiler-optimised libraries, High performance system administration

Universidad Católica San Antonio de Murcia

Murcia, Spain

Bachelor of Science - Computer Engineering; GPA: 9.31

October 2018 - June 2021

Courses: Computer Programming, Information Science, Networking, Operating Systems, Databases, Mathematics, Software Architecture, Algorithms, Data Structures

Universidad Católica San Antonio de Murcia

Murcia, Spain

Intern Student

October 2019 - June 2020

Objectives: Introduction to Machine Learning (ML) and Deep Learning (DL) using novel-models: MLPs, RNNs and CNNs

IES José Planes

Murcia, Spain

Higher National Certificate - Web App Developer; GPA: 8.84

October 2016 - June 2018

Courses: Databases, High-level Computer Architecture, Web Language, Client and Server side frameworks, Usability and UX+UI

SKILLS SUMMARY

• Languages: Python, C(++), Java, PHP, JavaScript, SQL, Bash, JAVA

• Frameworks: Laravel, Scikit, TensorFlow, Keras

Tools: Docker, GIT, SSH
Platforms: Linux, Web Apps, AWS

• Parallelization: OpenMP, MPI, CUDA, Heterogeneous Programming

• Others: Advanced Memory Usage (Memory Registers, Pinned Memory)

Experience

Universidad Católica San Antonio de Murcia

Murcia, Spain

Research Initiation Grant (Part-time)

Feb 2021 - Jul 2021

• **Objectives**: In charge of developing a hybrid accelerator (CPU+GPU) for a recommendation neural network model (DLRM, WATEROT) using specialized accelerator architectures for inference (SIGMA, MAERI). Aiming at maximizing the model efficiency, waiting times and studying memory accesses (W/R) and total cycles consumed.

Plinga GmbH

Berlin, Germany

Full-stack Web Developer Erasmus+ Internship (Full-time)

Mar 2018 - Sep 2018

• Experience acquired: First-hand experience on front-end and back-end of various PHP and Ruby projects, including Amazon AWS services (EC2 servers, Databases and CDNs)

Publications

- CPU-PCGCN: Procesamiento Eficiente de Redes Convolucionales de Grafos en Arquitecturas CPU (Deep Learning, Graph Neural Networks): Work in XXXII Jornadas de Paralelismo (JP). Tech: Python, PyTorch, C++, C, Bash (September '22)
- Evaluación de un Sistema de Recomendación en un Acelerador Híbrido (Deep Learning, Recommender System): Work in XXXI Jornadas de Paralelismo (JP). Tech: Python, PyTorch, C++, Bash (September '21)

Honors and Awards

- Extraordinary Award for the Best Academic Record (Bachelor Degree) Jun, 2022
- Research Initiation Grant (Bachelor Degree) Feb, 2021
- Erasmus+ Scholarship for an abroad Internship (HNC Degree) Mar, 2018