Gonzalo Martín

SOFTWARE ENGINEER AND PHD STUDENT IN COMPUTER SCIENCE


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LinkedIn


Github

Personal information

Date and place of birth June 22, 1984 in Cáceres, Spain
Nationality Spanish

Summary

Software engineer and Ph.D. student in Computer Science with 5 years of professional experience on large-scale systems, back-end and web development, and passionate about computers, technology and innovation.

Skills and qualifications

C, Python, Django, OpenStack, RESTful APIs, Amazon Web Services, Google App Engine, Postgres SQL, Google Datastore (NoSQL), Redis, Celery, RabbitMQ, Ansible, Chef, Git, Unix/Linux, Jenkins.

Current position

Software engineer - Fever Labs Inc. - January 2015—Present
Responsibilities: Development and implementation of new features of the application's back-end; integration with external APIs and third-party services; development and implementation of internal tools; DevOps (application deployment and IT automation).
Technologies: Python/Django (Django REST framework), RESTful API, AWS, Postres SQL, Celery, RabbitMQ, Git, Ansible.

Professional experience

Software engineer - MashMeTV - April 2014—December 2014
Responsibilities: Development and implementation of new features of the application's front-end and back-end; development and implementation of internal tools; DevOps (application deployment and IT automation).
Technologies: Python, Javascript, HTML5, CSS3, Sass, Google App Engine, AWS, Google Datastore, Celery, RabbitMQ, Git, Chef.

Software engineer and research assistant - Carlos III University - 2010—2013
Responsibilities: Research, development, and deployment of the back-end system of a distributed platform for gaming in the cloud.
Technologies: Python/Django, OpenStack, MySQL, Xen, Git, RESTful API.

Education

Ph.D. in Computer Science and Technology - Carlos III University - 2015
Thesis: "Optimization Techniques for Adaptability in MPI Applications"
Thesis defense date: December 2015.

M.Sc. in Computer Science and Technology - Carlos III University - 2011
Thesis: "EpiGraph: a Scalable Simulation Tool for Epidemiological Studies"
Grade: A.

B.Sc. in Computer Science - Carlos III University - 2010
Project: "Simulating the spreading of infectious diseases in urban environments"
Grade: With Honors.

Research publications

International Journals

Gonzalo Martín, David E. Singh, Maria-Cristina Marinescu and Jesús Carretero, "Enhancing the performance of malleable MPI applications by using performance-aware dynamic reconfiguration", Journal of Parallel Computing, vol. 46, 2015. **Impact Factor: 1.511**

Gonzalo Martín, David E. Singh, Maria-Cristina Marinescu and Jesús Carretero, "Towards efficient large scale epidemiological simulations in EpiGraph", Journal of Parallel Computing—Special Issue: Parallelism in Bioinformatics, vol. 42, 2015. **Impact Factor: 1.511**

Gonzalo Martín, Maria-Cristina Marinescu, David E. Singh and Jesús Carretero, "Leveraging social networks for understanding the evolution of epidemics", BMC Systems Biology, vol. 5, Supplement: 3(14), 2011. **Impact Factor: 3.57**

International Conferences

Gonzalo Martín, Maria-Cristina Marinescu, David E. Singh and Jesús Carretero, "FLEX- MPI: an MPI extension for supporting dynamic load balancing on heterogeneous non-dedicated systems", in *Euro-Par*, 2013.

Gonzalo Martín, Maria-Cristina Marinescu, David E. Singh and Jesús Carretero, "Parallel algorithm for simulating the spatial transmission of Influenza in EpiGraph", in *International Workshop on Parallelism in Bioinformatics - The 20th European MPI Users' Group Meeting, EuroMPI*, 2013.

Pablo Llopis, **Gonzalo Martín**, Borja Bergua and Jesús Carretero, ”Virtual I/O forwarding for cloud-based HPC applications”, in *The 10th International Symposium on Parallel and Distributed Processing with Applications, ISPA*, 2012.

Gonzalo Martín, Maria-Cristina Marinescu, David E. Singh and Jesús Carretero, ”Runtime support for adaptive resource provisioning in MPI applications”, in *The 19th European MPI Users' Group Meeting, EuroMPI*, 2012.

Gonzalo Martín, Maria-Cristina Marinescu, David E. Singh and Jesús Carretero, ”EpiGraph: A Scalable Simulation Tool for Epidemiological Studies”, in *The 2011 International Conference on Bioinformatics and Computational Biology, BIOCOMP'11*, pp. 529-537, 2011.

National Conferences

Manuel Rodríguez-Gonzalo, **Gonzalo Martín**, David E. Singh, María-Cristina Marinescu, Javier García Blas and Jesús Carretero. “FlexMPI: una biblioteca para proporcionar maleabilidad dinámica en aplicaciones MPI”, in Actas de las XXVI Jornadas de Paralelismo, 2015.

Collaboration in research projects

NIMBO: Video juegos distribuidos - Carlos III University - 2010—2013
Reference: IPT-430000-2010-14
Supported by Spanish Ministry of Science and Education (958,851.76€).
The goal of the project was the deployment of a distributed platform for a cloud-based video game system.

Research stay

Computer Architecture research team - Uppsala University (Sweden) - 2013
Supported by EU COST (European Cooperation in Science and Technology) Action IC0805 - Open Network for High-Performance Computing on Complex Environments.
Period: May 29, 2013—June 8, 2013.

Courses

Complex HPC Spring School 2013 - Uppsala University (Sweden) - 2013
International summer school for doctoral students in HPC and heterogeneous computing.

Scientific contributions

Reviewer for Journal of Future Generation Computer Systems

Reviewer for The 10th International Symposium on Parallel and Distributed Processing with Applications, ISPA

Member of the organizing committee of The 20th European MPI Users' Group Meeting, EuroMPI 2013

References

Dr. David Expósito Singh - Full professor at Carlos III University

Dra. Maria-Cristina Marinescu - Visitin professor at Barcelona Supercomputing Center

Dr. Jesús Carretero Pérez - Full professor and Vice-Dean at Carlos III University

November 2015.