



Pamela Delgado

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🌐 <https://pamedelgado.org>

Scientific interests

- Efficient resource management
- Systems for ML
- Big data
- Reproducibility
- Cloud computing
- Data science

Education

- 2018. PhD in Computer Science**
Hybrid, Job-Aware, and Preemptive Datacenter Scheduling
EPFL – Switzerland
- 2012. Master in Computer Science**
Specialization: Foundations of Software. GPA 5.36/6
EPFL – Switzerland
- 2008. Bachelor in Systems Engineering**
Graduated with honours
UCB – Bolivia
- 2006. Exchange student**
Pontificia Universidad Católica de Chile – Chile

Languages

French ●●●●
English ●●●●
Spanish ●●●●
German ●○○○
Italian ●●●●

Current situation

- Sept. 2022 – current **Assistant Professor UAS**
Data Engineering Bachelor ISC. Institute of Informatics. HES-SO Valais-Wallis.
- 2019 – current **Lecturer EPFL - SDSC.**

Professional Experience

- 2018-2022 Lecturer – Senior Systems Engineer**
Swiss Data Science Center – EPFL
Renku Data Science Platform <https://renkulab.io>
- 2013-2018 Doctoral researcher & Teaching assistant**
EPFL, Scheduling in Big Data clusters. Lausanne, Switzerland.
- 2013 Research Intern in System & Networking**
Microsoft Research, Fabric computing simulation. Cambridge, UK.
- 2011 Summer Intern**
KeyLemon SA, Face recognition App for Android. Martigny, Switzerland.
- 2009 – 2010 Software Engineer**
Outsourcing for Enable Consultants, Recess web application for Canadian schools. Toronto, Canada.
- 2008 – 2009 Software Engineer**
PirAMide Informatik SRL. Medical imaging and digital dictation modules. Cochabamba, Bolivia. In partnership with Medspazio. Geneva, Switzerland.
- 2006 – 2008 Software Engineer**
PirAMide Informatik SRL. EJB Automatic Migration Tool. Information systems development. Cochabamba, Bolivia.

Teaching Experience

- 2024 DevPro pedagogical training HES-SO**
- 2024 – present Big Data and Infrastructures for ML**, Bachelor HES-SO.
- 2024 – present Beyond Relational DBs**, Bachelor HES-SO.
- 2023 – present Operating Systems**, Bachelor HES-SO.
- 2020 – present Large-scale data science for real-world data**, Master EPFL.
- 2020 Critical Data Studies**, Lecturer, Master EPFL.
- 2019 Introduction to Operating Systems**, Lecturer, Bachelor EPFL.
- 2017 Analysis I**, Teaching assistant, Bachelor EPFL.
- 2012 – 2017 Operating Systems**, Teaching assistant, Bachelor EPFL.
- 2016 Programming I**, Teaching assistant, Bachelor EPFL.
- 2016 Information-communication-computation**, Teaching A., Bachelor EPFL.
- 2005 Operating Systems**, Teaching assistant, Bachelor UCB, Bolivia.

Awards & Achievements

- 2019** Honorable mention. Distinguished dissertation award. SPEC.
- 2019** Thesis nominated for EPFL's Doctoral Program Distinction. EPFL.
- 2013 - 2018** Microsoft Research Grant. Towards Resource Efficient Datacenters.
- 2013** Google Anita Borg Memorial Scholarship EMEA. Google Inc.
- 2012** Master's Final Project maximum score. EPFL.
- 2010 - 2012** Swiss Federal Scholarship for Foreign Students. Swiss Confederation.
- 2006** Academic Excellence Scholarship. Pontificia Universidad Católica de Chile.

Student Supervision

EPFL Master - Sami Ferchiou (2024)

EPFL Master - Vittorio Rossi (2024)

HES-SO Bachelor - Samuli Lehtinen (2023)

Service

CCGRID 2025 PC member

AMLD 2025 track chair: AI in data and computer systems

AI days HES-SO Program Chair

ACM SoCC 2024 PC member

CCGRID 2024 PC member

ACM SoCC 2023 PC member

Eurosys 2023 PC member

JPDC 2023 reviewer

UCC/BDCAT 2022/2023 artifact evaluation chair

SC23 artifact reviewer

ICPP 2023 Repr. PC member

IEEE/ACM UCC 2021 artifact reviewer

JCC 2021 reviewer

TPDS 2021/2018 reviewer

T-ASE 2016 reviewer

SDSC project call reviewer

CHIST-ERA 2023 ORD project reviewer

CH leading house MENA project reviewer

Technical Skills

DevOps: Kubernetes (Openstack, GKE, AKS), Docker, Terraform, Packer, CI/CD

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

BigData: Spark, Hadoop, HDFS

Operations: Gitlab, Keycloak, Prometheus, Grafana, Sentry

MLOps: Tensorflow, Jupyter

Release management.

Projects, Collaborations & Grants

2025-2028 *DEEP: Deep Learning Resource-Efficient GPU Orchestrator*. Project funding SNSF. Co-investigator scheme with ITU Copenhagen.

2024 - present *PI at Swiss AI initiative* <https://www.swiss-ai.org/>. Horizontal Infrastructures.

2023 - 2024 *Pilot project with Lonza*. ADRP - Anomaly Detection Platform for Biomanufacturing.

2023 - present *Swiss AI center for SMEs*. Flagship project for HES-SO.

2023 *Energy EmoMaps*. Interdisciplinary project funded by Axe TN. HES-SO.

2020 *EasyFAIR*. Swissuniversities. In collaboration with ETHZ, ZHAW, HSLU.

2019 *Renku proposal for GCP research credits*. Google Cloud Platform GCP research credits grant.

2021 *Renku Integration at FSO*. Mandate with the Federal Statistics Office.

2020 *BAG Health Data Science*. Collaboration with the COVID Task Force.

2020 *Deploying Renku in an offline environment*. Collaboration with the Health2030 Genome Center.

2019 *Renku deployment at Openshift*. Mandate and collaboration with Red Hat.

2013 - 2018 *Towards Resource Efficient Datacenters*. Grant from Microsoft Research. Swiss Joint Research Center.

2013 *Research intern in Systems and Networking Simulation Research for Fabric Computers*, Microsoft Research Cambridge. Anthony Rowston.

2012 *Domain Specific Language for Distributed Algorithms in Scala* Master project LSR, EPFL Prof. André Schiper

2011 *Invariant Verifier for Parallel Programs* Semester project LAMP, EPFL Prof. Martin Odersky

2011 *STAMP in Java: Benchmark for Software Transactional Memory* Semester project LPD, EPFL Prof. Rachid Guerraoui

Publications

Towards reproducible software studies with MAO and Renku. J Spillner, P Gkikopoulos, P Delgado, C Choirat. *SoftwareX*. 17(100947). (2022)

Kairos: Preemptive Data Center Scheduler Without Runtime Estimates. P Delgado, D Didona, F Dinu, W Zwaenepoel. *The ACM Symposium on Cloud Computing (SoCC)*. Carlsbad, CA, USA. (2018)

Job-Aware Scheduling in Eagle: Divide and Stick to Your Probes. P Delgado, D Didona, F Dinu, W Zwaenepoel. *The ACM Symposium on Cloud Computing (SoCC)*. Santa Clara, CA, USA. (2016).

Eagle: A Better Hybrid Data Scheduler. P Delgado, D Didona, F Dinu, W Zwaenepoel. *Poster at 11th European Conference on Computer Systems (EuroSys)*. London, UK. (2016).

Hawk: Hybrid Datacenter Scheduling. P Delgado, F Dinu, AM Kermarrec, W Zwaenepoel. *The USENIX Annual Technical Conference (ATC)*. Santa Clara, CA, USA. (2015).

Distal: A Framework for Implementing Fault-tolerant Distributed Algorithms. M Biely, P Delgado, Z Milosevic, A Schiper. *43rd Annual IEEE/IFIP International Conference on Dependable Systems and Networks (DSN)*. Budapest, Hungary. (2013).

Efficiently Scheduling Data-Parallel Computations on Very Large Clusters. P Delgado, K Elmeleegy, AM Kermarrec, W Zwaenepoel. *Poster at the European Conference on Computer Systems EuroSys*. Prague, Czech Republic. (2013).