Manuel O. J. Olguín Muñoz

https://olguin.se | https://github.com/molguin92

See above URLs for full list of academic achievements and publications.

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Current

- **Carnegie Mellon University** — Pittsburgh, PA
  Short-term Scholar. Sponsor: Dr. Mahadev Satyanarayanan — *Nov. 2017 — (Present)*

  Collaboration with the *Elijah* group on the topics of *Edge Computing* and *Wearable Cognitive Assistance*.

- **KTH Royal Institute of Technology** — Stockholm, Sweden
  Doctoral Researcher. Advisor: Dr. James Gross — *Sep. 2017 — (Present)*

  Research interests broadly in mobile, cloud, and pervasive computing and low-latency systems and architectures.

Past

- **NIC Chile Research Labs** — Santiago, Chile
  Graduate Research Assistant — *Aug. 2015 — June 2017*

  Developed a framework integrating a discrete event simulator with a traffic simulator, for Intelligent Transport System scenarios simulation.

- **Epistemonikos Foundation** — Santiago, Chile
  Software Developer — *Aug. 2016 — Dec. 2016*

  Designed and deployed a number of in-house software solutions to optimize workflow and improve efficiency in the activities of the foundation (principally in the form of RESTful web services).

Education

- **Ph.D., Electrical Engineering** — Ongoing
  KTH Royal Institute of Technology — *Sep. 2017 — (Present)*
- **Engineer's Degree, Computer Science** — Graduated with Highest Honors
  Universidad de Chile — *Mar. 2011 — Aug. 2017*
- **B.Eng.Sc. in Computer Science** — Graduated with Honors
  Universidad de Chile — *Mar. 2011 — Aug. 2017*

Publications

[1] Manuel Osvaldo J. Olguín Muñoz, Junjue Wang, Mahadev Satyanarayanan, and James Gross. 2019. EdgeDroid: An Experimental Approach to Benchmarking Human-in-the-Loop Applications. In *Proceedings of the 20th International Workshop on Mobile Computing Systems and Applications* (HotMobile '19). ACM, Santa Cruz, CA, USA, 93–98. ISBN: 978-1-4503-6273-3. DOI: 10.1145/3301293.3302353. http://doi.acm.org/10.1145/3301293.3302353.

[2] Manuel Olguín Muñoz, Junjue Wang, Mahadev Satyanarayanan, and James Gross. 2018. Demo: Scaling on the Edge – A Benchmarking Suite for Human-in-the-Loop Applications. In *2018 IEEE/ACM Symposium on Edge Computing (SEC)*, 323–325. DOI: 10.1109/SEC.2018.00031.

[3] Manuel Olguín Muñoz. 2017. *Diseño e Implementación de un Framework Integrado para Simulaciones de Sistemas Inteligentes de Transporte en OMNeT++ y Paramics*. Engineer's Degree Thesis. Universidad de Chile, Santiago, Chile. http://repositorio.uchile.cl/handle/2250/147392.

Technical Skills

- Programming languages: Python, Java, C++, C.
- Markup languages: HTML+CSS, LaTeX, Markdown.
- Operating Systems: Skills in Linux-based OSs.
- Data Analysis and Visualization: Pandas, Numpy, Matplotlib, Tableau.

Languages

Spanish *(Native)*, **English** *(Fluent)*, **Swedish** *(Fluent)*.

References

- **James Gross**, Associate Professor of Electrical Engineering.
  School of Electrical Engineering and Computer Science, KTH Royal Institute of Technology.
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- **Sandra Céspedes**, Assistant Professor of Electrical Engineering.
  Department of Electrical Engineering, Universidad de Chile.
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- **Jérémy Barbay**, Assistant Professor of Computer Science.
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