


CURRICULUM VITAE

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| PERSONAL INFORMATION | RAFFAELE MONTELLA |
|  | University of Naples "Parthenope", Via: Acton 38, City: Naples (Italy) |
| | Tel.: +390815476613 Mobile: +393393055922 |
| | E-mail: raffaele.montella@uniparthenope.it |
| | https://raffaelemontella.it |
| | Male / 10.05.1972 |
| | h-index: 23 Total citations: 1122 (Scopus) |

| Industry | University | EPR |
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| <input type="checkbox"/> Management Level | <input type="checkbox"/> Full professor | <input type="checkbox"/> Research Director and 1 st level Technologist; First Researcher and 2 nd level Technologist |
| <input type="checkbox"/> Mid-Management Level | <input checked="" type="checkbox"/> Associate professor | <input type="checkbox"/> 3 rd level Researcher and Technologist |
| <input type="checkbox"/> Employee/worker level | <input type="checkbox"/> 4 th , 5 th , 6 th and 7 th level Researcher and Technologist; Technical collaborator | <input type="checkbox"/> 4 th , 5 th , 6 th and 7 th level Researcher and Technologist; Technical collaborator |

WORK EXPERIENCE

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| 2022 - present | POSITION: Associate Professor of Computer Science (INF01, 01/B1) with tenure. |
| | INSTITUTIONAL ADDRESS: University of Naples "Parthenope", Naples, Italy. |
| | Research Topics: High-Performance Computing, Cloud Computing, GPU Virtualization, Scientific Workflows, Internet of Things, Computational Environmental Science. |
| | Research or Industry: Research |
| 2008 - 2021 | POSITION HELD Assistant Professor of Computer Science (INF01, 01/B1) with tenure. |
| | INSTITUTIONAL ADDRESS: University of Naples "Parthenope", Naples, Italy. |
| | Research Topics: High-Performance Computing, Cloud Computing, GPU Virtualization, Scientific Workflows, Internet of Things, Computational Environmental Science. |
| | Research or Industry: Research |

EDUCATION AND TRAINING

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| 2005 | PhD in Marine Science and Engineering |
| | University of Naples "Federico II" |
| | Topics: Environmental modelling with Grid Computing |
| 1998 | M.Sc+B.Sc in Environmental Science |
| | Naval University of Naples |
| | Topics: Development of a GIS for marine applications |

PROJECTS (last five years)

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| | Indicate only projects with leadership roles |
| 2023 – 2025 | FGPE Plus Plus: Gamified Programming Learning at Scale (Erasmus Agency, Local PI) |
| 2023 – 2028 | MytilEx: Extended Modeling mytilus farming System with High-Performance Computing and Artificial Intelligence (Campania Region, PI) |
| 2022 – 2023 | DX4S: DataX for the Sea (NEC Labs of America, PI) |
| 2020 – 2023 | Borgo 4.0: A-Mobility (Campania Region, Local PI) |
| 2021 – 2023 | FGPE Plus: Learning tools interoperability for gamified programming education (Erasmus Agency, Local PI) |
| 2021 – 2023 | MytilAI: Modeling mytilus farming with Artificial Intelligence technologies (Campania Region, PI) |
| 2021 – 2024 | ADMIRE: Adaptive Multi-tier intelligent data manager for Exascale (H2020 EuroHPC, Local PI) |
| 2018 – 2021 | FGPE: Framework for Gamified Programming Education (Erasmus Agency, Local PI) |

ADDITIONAL INFORMATION

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| 2023 | Italian National Academic Qualifications as a Full Professor in Computer Science (01/B1) |
| 2022 | Head of AWS Academy @ uniparthenope |
| 2022 | Director of the High-Performance Scientific Computing laboratory |
| 2022 | Dead of the University of Naples "Parthenope" node of the CINI National Laboratory "HPC: Key Technologies and Tools" |
| 2012 | Founder and curator of the Museum of Computational Architectures (MArC) |
| 2010 | Chief of Technical Operations (CTO) of the Center for Marine and Atmosphere Monitoring and Modeling (CMMMA) |

PUBLICATIONS

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| <p>Most relevant publications of the last 10 years</p> | <ol style="list-style-type: none">1. Montella, Raffaele, David Kelly, Wei Xiong, Alison Brizius, Joshua Elliott, Ravi Madduri, Ketan Maheshwari et al. "FACE-IT: A science gateway for food security research." <i>Concurrency and Computation: Practice and Experience</i> 27, no. 16 (2015): 4423-4436.2. Di Luccio, Diana, Angelo Riccio, Ardelio Galletti, Giuliano Laccetti, Marco Lapegna, Livia Marcellino, Sokol Kosta, and Raffaele Montella. "Coastal marine data crowdsourcing using the Internet of Floating Things: Improving the results of a water quality model." <i>IEEE Access</i> 8 (2020): 101209-101223.3. Marcellino, Livia, Raffaele Montella, Sokol Kosta, Ardelio Galletti, Diana Di Luccio, Vincenzo Santopietro, Mario Ruggieri, Marco Lapegna, Luisa D'Amore, and Giuliano Laccetti. "Using GPGPU accelerated interpolation algorithms for marine bathymetry processing with on-premises and cloud based computational resources." In <i>International Conference on Parallel Processing and Applied Mathematics</i>, pp. 14-24. Cham: Springer International Publishing, 2017.4. Montella, Raffaele, Diana Di Luccio, Pasquale Troiano, Angelo Riccio, Alison Brizius, and Ian Foster. "WaComM: A parallel Water quality Community Model for pollutant transport and dispersion operational predictions." In <i>2016 12th International Conference on Signal-Image Technology & Internet-Based Systems (SITIS)</i>, pp. 717-724. IEEE, 2016.5. Montella, Raffaele, Sokol Kosta, David Oro, Javier Vera, Carles Fernández, Carlo Palmieri, Diana Di Luccio, Giulio Giunta, Marco Lapegna, and Giuliano Laccetti. "Accelerating Linux and Android applications on low-power devices through remote GPGPU offloading." <i>Concurrency and Computation: Practice and Experience</i> 29, no. 24 (2017): e4286.6. Montella, Raffaele, Giulio Giunta, Giuliano Laccetti, Marco Lapegna, Carlo Palmieri, Carmine Ferraro, Valentina Pelliccia, Cheol-Ho Hong, Ivor Spence, and Dimitrios S. Nikolopoulos. "On the virtualization of CUDA based GPU remoting on ARM and X86 machines in the GVirtuS framework." <i>International Journal of Parallel Programming</i> 45 (2017): 1142-1163.7. Montella, Raffaele, Diana Di Luccio, and Sokol Kosta. "Dagon: Executing direct acyclic graphs as parallel jobs on anything." In <i>2018 IEEE/ACM Workflows in Support of Large-Scale Science (WORKS)</i>, pp. 64-73. IEEE, 2018.8. Montella, Raffaele, Giulio Giunta, and Giuliano Laccetti. "Virtualizing high-end GPGPUs on ARM clusters for the next generation of high performance cloud computing." <i>Cluster computing</i> 17 (2014): 139-152.9. Montella, Raffaele, Carmine Ferraro, Sokol Kosta, Valentina Pelliccia, and Giulio Giunta. "Enabling android-based devices |
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to high-end gpgpus." In *Algorithms and Architectures for Parallel Processing: 16th International Conference, ICA3PP 2016, Granada, Spain, December 14-16, 2016, Proceedings 15*, pp. 118-125. Springer International Publishing, 2016.

10. Montella, Raffaele, Giulio Giunta, Giuliano Laccetti, Marco Lapegna, Carlo Palmieri, Carmine Ferraro, and Valentina Pelliccia. "Virtualizing CUDA enabled GPGPUs on ARM clusters." In *Parallel Processing and Applied Mathematics: 11th International Conference, PPAM 2015, Krakow, Poland, September 6-9, 2015*.

11. Laccetti, Giuliano, Raffaele Montella, Carlo Palmieri, and Valentina Pelliccia. "The high performance internet of things: using GVirtuS to share high-end GPUs with ARM based cluster computing nodes." In *International Conference on Parallel Processing and Applied Mathematics*, pp. 734-744. Berlin, Heidelberg: Springer Berlin Heidelberg, 2013.

12. Montella, Raffaele, Sokol Kosta, and Ian Foster. "DYNAMO: Distributed leisure yacht-carried sensor-network for atmosphere and marine data crowdsourcing applications." In *2018 IEEE International Conference on Cloud Engineering (IC2E)*, pp. 333-339. IEEE, 2018.

13. Montella, Raffaele, Mario Ruggieri, and Sokol Kosta. "A fast, secure, reliable, and resilient data transfer framework for pervasive IoT applications." In *IEEE INFOCOM 2018-IEEE conference on computer communications workshops (INFOCOM WKSHPS)*, pp. 710-715. IEEE, 2018.

14. Sánchez-Gallegos, Dante Domizzi, Diana Di Luccio, Sokol Kosta, J. L. Gonzalez-Compean, and Raffaele Montella. "An efficient pattern-based approach for workflow supporting large-scale science: The DagOnStar experience." *Future Generation Computer Systems* 122 (2021): 187-203.

15. Montella, Raffaele, Diana Di Luccio, Livia Marcellino, Ardelio Galletti, Sokol Kosta, Giulio Giunta, and Ian Foster. "Workflow-based automatic processing for internet of floating things crowdsourced data." *Future generation computer systems* 94 (2019): 103-119.

16. Montella, Raffaele, Alison Brizius, Diana Di Luccio, Cheryl Porter, Joshua Elliot, Ravi Madduri, David Kelly, Angelo Riccio, and Ian Foster. "Using the face-it portal and workflow engine for operational food quality prediction and assessment: An application to mussel farms monitoring in the bay of napoli, italy." *Future Generation Computer Systems* 110 (2020): 453-467.

According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV.

Date and signature

07/02/2024 Raffaele Montella

