

## Press Release: SparCity Project Concludes with Notable Achievements and Lasting Impact

The SparCity project, a three-year endeavor funded by the European High Performance Computing Joint Undertaking (EuroHPC JU), has successfully reached its conclusion in March 2024. With the aim of creating a supercomputing framework to maximize the performance and energy efficiency of sparse computations on emerging HPC systems, the project has made significant contributions to the field of high-performance computing (HPC).

Throughout its lifetime, SparCity has been dedicated to advancing research and development in sparse computations. The project's communication and dissemination efforts have been extensive, resulting in the creation of a comprehensive suite of promotional materials, including a visual identity, project website, social media presence on Twitter and LinkedIn, press releases, project posters, and newsletters. The project team organized four workshops and four demo events, which served as platforms for knowledge exchange and collaboration.

A key measure of the project's success is its impressive publication record. SparCity published 27 high-impact papers in international conferences, journals, and workshops, covering topics such as optimization frameworks, sparse matrix operations, and energy-efficient computing. The project's research outputs have been recognized in top-tier venues such as IEEE TPDS, IPDPS, and SC, showcasing the timeliness and importance of the work carried out by the SparCity team.

Advisory board member Bora Uçar, Directeur de Recherche at CNRS and LIP, commended the project's achievements, stating, "The project was successful in terms of advancing the state of the art, joining *European expertise on different aspects of parallel and sparse computing, and creating synergy from this joint undertaking.*" He also highlighted the project's investment in nurturing the next generation of researchers, with 14 MSc theses and contributions to PhD research.

Michelle Strout, former professor and now senior engineering manager at Hewlett Packard Enterprise, praised the SparCity project for its research infrastructure contributions and relevance to industry and academic research. "*The generation of realistic sparse matrices and tensors, pre-processing tools, and visualization of computations in the roofline model are some of the contributions I am most excited about,*" she said.

As the project concludes, its legacy continues through its open-source tools, research contributions, and the nurturing of future talent in the field of HPC. The final issue (Issue 6) of the project newsletter provides an in-depth overview of SparCity's achievements and impact. The project team extends heartfelt gratitude to all partners, collaborators, and the community for their support and contributions to the success of SparCity. For more information about the SparCity project and its outcomes, please visit SparCity's website.

Sincerely,

The SparCity Coordination, Dr. Didem Unat



