

Welcome to KFUPM

Dr. Amal Alghamdi

Assistant Professor

Department of Information & Computer Science

Affiliated with Interdisciplinary Research Center for Intelligent Secure Systems



Education:

Ph.D. in Computational Science,
Engineering, and Mathematics,
University of Texas at Austin, USA

Previous Institution:

Technical University of
Denmark; Postdoctoral
Researcher (2021 – 2025)

Research Profile (SCOPUS):

Total Citations: **131**

Total Journal Publications: **8**

H-index: **6**

Professional Interests:

Computational Science, Inverse Problems,
Uncertainty Quantification, Numerical Methods,
Mathematical Modeling, High-Performance
Computing, Partial Differential Equations (PDEs)

About Dr. Alghamdi:

Dr. Amal is a computational scientist who develops scalable computational methods and physics-based models for Bayesian inverse problems, integrating diverse data sources to improve the understanding, prediction, and optimization of natural and engineered systems, with applications in geoscience, medical imaging, and biomedicine. She also has expertise in high-performance computing, PDE-based modeling, and the development of open-source scientific software.