

Dr. Emad A. El-Sebakhy Short Biography

Dr. El-Sebakhy received his PhD from Cornell University, Ithaca, NY, USA in 2003-2004, specialized in Computer Science and Statistics with minor in Electrical Engineering. After his graduation, he joined the State University of New York, Oneonta, Albany, NY, USA as a tenure-assistant professor of Computer Science in 2003-2004. Next, he joined King Fahd University of Petroleum & Minerals, Dhahran, Saudi Arabia in 2005 as an Assistant Professor of Computer Science within the Information and Computer Science Department, College of Computer Science and Engineering.

Dr. El-Sebakhy has five years experience in “The Utilization of Artificial Intelligence in Bioinformatics and Software Engineering Industry”. He started as a research scientist and Software engineering within Autodesk Inc., CA, USA. Next, he worked as a system analyst within the Science and Technology park of Micro-array Technology and Bioinformatics, Corning Inc. Corning, NY, USA.

Dr. El-Sebakhy’s research interests include Artificial Intelligence, Data Mining, Pattern Recognition, and Bioinformatics, and its applications in Software Engineering, Oil and Gas Industry, Business and Management. He has published numerous research articles in the most reputable international ISI journals, IEEE Transactions, Elsevier, and conference proceedings. He is a reviewer for distinct reputable journals, such as, Neurocomputing and IEEE Transactions with several conferences in the areas of Data Mining, Artificial Intelligence, and Pattern Recognition.

Dr. El-Sebakhy has established a successful research group in intelligent Systems, machine learning, and data mining technologies with its applications in Bioinformatics, Software Engineering, and oil and gas industry. He and his research group developed software based on MATLAB, C++, C#, and java to be utilized in Bioinformatics, Software Engineering, control systems of steel industry, and oil and gas industry. With numerous colleagues and students, they investigated machine learning forecasting, classification, simulation models, develop numerous machine learning and data mining packages that can work as a standalone application or can be integrated with developed packages.

Dr. El-Sebakhy accomplished an extensive record of client and funding research projects with numerous real-world industries, such as, bioinformatics, 3D seismic data, permeability prediction with both King Abdul-Aziz of Science and Technology (KACST), Saudi ARAMCO and SABIC. Dr. El-Sebakhy and his research group carry new research ideas and develop new frameworks for such software application with a friendly graphical user interface and web based on the customer needs. The most research ideas were done in the utilization of the challenge state of the art and new ideas within the research side of computational Intelligence, machine learning, softcomputing, data mining, pattern recognition, and computational biology. Dr. El-Sebakhy has been involved in numerous oil and gas industry projects within ARAMCO and KFUPM regarding developing computational intelligence and data mining software for predicting reservoir properties, Reservoir Virtual PVT lab, permeability and porosity of rock mechanics, viscosity, simulation with risk analysis, and history matching.

Dr. El-Sebakhy and his research group published numerous articles in referred journal and conference proceedings within numerous multidisciplinary research areas. They developed new software’s, research report with MASTER/PHD, organized conferences, workshops, and invited seminars. Dr. El-Sebakhy served on numerous technical program committees, advisory graduate students in the area of Machine Learning and Data Mining and its applications in petroleum industry, E-Business and Manufacturing, Bioinformatics, and Software engineering industry. He developed new courses in advanced artificial intelligent systems with both data mining and machine learning in pattern recognition.

Dr. El-Sebakhy is a member of the Society of Petroleum Engineering, Artificial Intelligence Association and American Mathematical Society, and Computer Society of the Institute of Electrical and Electronics Engineers.