Email: msaleh@mailer.eun.eg
mohamed@engr.uconn.edu
Mobile No.: (012)920-1075

Mohamed A. Saleh

OBJECTIVE

- ***Challenging position in Computer Science and Information Technology***

EDUCATION

1. ***Visiting Assistant Professor*, Computer Science Department, Faculty of Engineering, University of Connecticut, CT, USA, 2003-2004**

2. ***Ph.D. in Computer Science and Engineering*, University of Connecticut, CT, USA, August 2003.** Course Work: Software Performance Engineering, Special Topics in Artificial Intelligence, Queuing Theory, Probabilistic Models, Estimation and Detection, Computer Architecture, Multimedia, Performance Analysis & Modeling of Object Oriented Applications, Theory of Automata, Complexity Analysis, Distributed Objects, Distributed Operating System, Distributed Algorithms, Natural Language Processing, Distributed Systems, Optimization, Time Series Forecasting, Data Communication & Computer Networks Applied Statistical Models, Setup of Experiments, Simulation, and Teaching & Learning Fundamentals. ***Professional GPA: 4.04/4.0***.
   Ph.D. Thesis Title:
   "Adaptive Scheduling of Multi-Scale Processes in Dynamically Re-configurable Networked Computers"

3. ***M.Sc. in Computer Science*, Rochester Institute of Technology, Rochester, NY, USA, May 1995.** Course Work: Neural Networks, Genetic Algorithms, Operating Systems, Computer Graphics, Artificial Intelligence, Computer Architecture, Programming Language Theory, Advanced Topics in Computation Theory, Data Communication and Networking, Advanced Topics in Data Communication and Networking, Microprocessor, Object Oriented Programming and Design. ***Major Concentration***: Artificial Intelligence, Tie Series Analysis and Forecasting. ***Minor Concentration***: Data Communication & Networking. ***Professional GPA: 4.0/4.0***. **M.Sc. Project Title: "*Time Series Analysis of Periodical Signals*".**

4. ***B.Sc. in Telecommunications and Electronics*, Faculty of Engineering, Helwan University, Cairo, Egypt, June 1988.** Course Work included extensive classes in: Mathematics, Mechanics, Physics, Chemistry, Engineering Drawing, Analog & Digital Electronics, Analog & Digital Communication systems, Data Communication and Networking, Information theory, Computer Hardware and Interfacing, Computer Programming, Electromagnetic Wave Theory, and Automatic Control.
   Graduated with Honor Degree*, (First in class).*

WORK EXPERIENCE

- ***Director*, Scientific Computing Center, Helwan University, Dec. 2004- Till now.**
- ***Director*, Helwan University Campus Network, Dec. 2004 – Till now.**

- ***IT Consultant for the*** **Ministry of State for Administrative Development for the e-Government Projects. Providing an IT consultations for the Ministry of Investment, the Mortgage Financial Authority, and the Capital Market Authority, Feb 2005 – Till now.**

- ***Senior system Administrator,*** **Computational Grid, Access Grid, and Distributed Computing Laboratory, University of Connecticut, CT, USA, 2001-2004.**

- ***Technical Support Consultant,*** **Booth Engineering Center for Advanced Technology, University of Connecticut, 1998-2001**
  - System Administrator: Windows, Linux, and Unix, 1998 - 2003
  - Designed and Administrated the School of Engineering Windows NT Domains, 1998- 2001
  - Managed the School of Engineering Learning Center (Computer Labs and Network), 1998 – 2001

- **Network and System Administrator, Computer Science Department, American University in Cairo, 1995-1997.**

- **Technical Support Manager, Saudi Soft Co., 1996-1997.**

- ***Software Developer,*** **IBM T.J. Watson Research Center, NY, USA, 1995.**

- ***System Administration, Rochester Institute of Technology, NY, USA, 1994.***

- ***Technical Support Manager, Phoenix Co., 1990-1993.***

Project Management

- ***Project Manager and PI for Helwan University Networking and IT Infrastructure Project, Budget 450K$, Feb. 2005 till Aug. 2006.***

- ***Project Manager, International Computer Driving License Project (ICDL), Helwan University.***

RESEARCH EXPERIENCE

- ***Visiting Assistant Professor*****, Computer Science Dept., University of Connecticut, CT, USA, 2003-2004**

- ***Senior Research Assistant*****, US-Egypt Cooperative Research, *RAMSys: Collaborative Metacomputing System* – Computational Grid Collaboration Project**.

- ***Research Aide*****, Distributed Computing Laboratory, Argonne National Laboratory, IL, USA, 2001**

- ***Research Assistant,*** **Booth Engineering Center for Advanced Technology (BECAT), University of Connecticut, CT, USA, 1998 – present**
  - Initiated, Designed, and administrated the ***BECAT*** **Computational Grid Laboratory.**
  - **Designed and Developed *BECAT Seminar series on Clusters, Grids, and Distributed Computing***

- ***Research Assistant*****, Grid Computing & Computational Medicine Laboratory, University of Connecticut, CT, USA, (1998-present).** Designed and developed computer software packages and algorithms for:

- Adaptive Grid Scheduling
- Adaptive Image Compression of Volumetric and Sequential Images
- Intelligent Adaptive Scheduling in Gird Environments
- Time Series Analysis and Nonlinear models for Performance Forecasting
- Object Oriented Performance Modeling

- ***Research Assistant*, Rochester Institute of Technology, Rochester, NY, USA, 1993-1995**

- ***Research Assistant*, Faculty of Engineering, Helwan University, 1988-1993**

TEACHING EXPERIENCE

- ***Assistant Professor*, Faculty of Engineering, Helwan University, 2004- till now.**

- ***Assistant Professor*, Canadian International College, Egypt, 2004.**

- ***Assistant Professor*, Computer Department, University of Connecticut, CT, USA, 2004.**

- ***Teaching Assistant*, Computer Science Department, University of Connecticut, CT, USA, 2001,** I worked as a TA for the: Networking, JAVA, and Software Engineering Courses.

- ***Teaching Assistant*, Computer Science Department, American University in Cairo, 1995-1997.**

- ***Assistant Lecturer*, Faculty of Engineering, Helwan University, Cairo, Egypt, 1988-1993 & 1996-1998.**

SELECTED PUBLICATIONS

1. M. Saleh and I.R. Greenshields: *"**Compression of Sequential Images**"*. CBMS'99 - 12th IEEE Symposium on Computer Based Medical Systems, Stamford, CT, USA 1999.

2. M. Saleh and I.R. Greenshields: "***Adaptive Scheduling of Multi-Scale Process in A Dynamically Re-Configurable Networked Computers***", Technical Report#:BRC/CSE-TR-00-3, CT, USA, 2000.

3. M. Saleh and I.R. Greenshields: *"**Learning Algorithms for Task Distribution in a Metacomputing Environment**"*, Advanced Simulation Technologies Conference, High Performance Computing, Seattle, Washington, USA, 2001**.**

4. M. Saleh and I.R. Greenshields: *"**A Multi-Agent Architecture for Distributing Processes in a Collaborative Computational Medical Grid**"*, HealthCom, Italy, 2001.

5. M. Saleh and I.R. Greenshields: *"**HUSKY: A Multi-Agent System for Adaptive Resource Allocation in Computational Grids**"*, ISSPIT-IEEE, Cairo, Egypt, 2001.

6. M. A. Saleh and I.R. Greenshields: "Husky: A Multi-agent System for Adaptive Scheduling of Grid-Aware Applications", Presented Advanced Simulation Technologies, HPC-2002, San Diego, 2002.

7. M. Saleh and I.R. Greenshields: "***Adaptive, Multi-resolution Visualization of Large Scale Sequential Images in Computational Grids",*** Advanced Simulation Technologies Conference, High Performance Computing, Orlando, FL, USA, 2003.

SELECTED PROJECTS

Designed and Developed Algorithms and Software Packages for:

- ***Simulation of Adaptive Multi-Scale Process Scheduling in Computational Grids***, University of Connecticut, CT, USA, 2003
- ***Distributed Load Balancing and Scheduling on a Cluster of Work Stations***, University of Connecticut, CT, USA, 2001-2003
- ***Compression of Sequential and Volumetric Images*** using: Recurrent Neural Network, Wavelets, and Genetic Algorithms, University of Connecticut, CT, USA, 2002
- ***Discrete Fourier Transform, 1D and 2D Wavelets***, Non-Uniform Quantization, and Run length encoding, University of Connecticut, 2001
- ***Time Series Prediction Using Recurrent Neural Network***, University of Connecticut, CT, USA, 2001
- ***Dynamic task allocation using Genetic Algorithms***, University of Connecticut, CT, USA, 1998
- ***Natural Language Processing using Recurrent Neural Network***, University of Connecticut, CT, USA, 1998
- ***Object Oriented Performance Modeling***, University of Connecticut, CT, USA, 1998
- ***3-D ultrasonic Robot Eye using Neural Networks***, Helwan University, Egypt, 1992
- ***Computer Based speech Recognition***, Helwan University, Egypt, 1988

AWARDS

- ***University of Connecticut***, Booth Engineering Center for Advanced Technology Fellowship, CT, USA, 2003
- ***University of Connecticut***, Pre-doctoral Fellowships, 1999, 2002, & 2003
- ***Argonne National Laboratory*** (ANL), Ph.D. Graduate Student Research Aide Award**,** IL, USA, 2001
- ***High Performance Distributed Computing (HPDC),*** Student Travel Award, San Francisco, USA, 2001
- ***The Global Grid Forum and Sun Microsystems,*** student travel Award, Boston, USA, 2000
- ***University of Connecticut,*** Graduate Assistantships: 1998-2003
- ***IBM T.J. Watson Research Center***, Research Assistantship, NY, USA, 1994
- ***Rochester Institute of Technology,*** Student Employment Certificate of Appreciation, NY, USA, 1994 &1995

HONORS

- Graduation with **Professional GPA 4.043/4.0,** Ph.D., University of Connecticut, CT, USA, 2003
- Graduation with **Professional GPA 4.0/4.0,** M.Sc., Rochester Institute of Technology, NY, USA, 1995
- Dean's List for the **Outstanding Student Award**, Rochester Institute of Technology, NY, USA, 1994
- Graduation with **Honor Degree**. *First in class.* Faculty of Engineering, Helwan University, Egypt, 1988
- Undergraduate Student **Honor list**, Faculty of Engineering, Helwan University, Egypt, 1985-1988.

COMPUTER SKILLS

- ***Programmed extensively using the following programming languages*:** Assembly Language, FORTRAN, C, Object Oriented Programming, Borland C++, Visual C++, JAVA, Prolog, Lisp, Small Talk, Perl, Unix/Linux Shell/Scripts programming, and S/R Statistical Programming Languages.

- ***Programmed extensively on the following computer platforms*:** Windows, IBM (OS/2), UNIX, X-Windows, SUN Workstations (UNIX), AIX, Ultrix, SOLARIS, DIGITAL, and PC LINUX.

COMPUTER TRAINING

- Project Management, Regional Information Technology Institute (RITI), Cairo, Egypt, 2005
- Load Sharing Facility (LSF), Boston, USA, 2003
- Argonne National Laboratory, IL, USA, 2001
- Booth Engineering Center for Advanced Technology, CT, USA, 1999-2001
- IBM Skill Dynamics, NY, USA, 1995
- IBM T.J. Watson Research Center, NY, USA, 1995
- Rochester Institute of Technology, Rochester, NY, USA, 1994-1995
- Citizen Europe, 1990

RESEARCH INTEREST

- Grid and Cluster Computing, Parallel and Distributed Computing, High Performance Computing, Object Oriented Performance Modeling, Operating Systems, Middleware Design, Adaptive Scheduling and Load Balancing, Multimedia and Real Time applications, Visualization, Intelligent Data Analysis, Distributed Mobile Agents, Artificial Intelligence, Natural Language Processing.

References Available Upon Request.