

Syed Zain Masood

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Work Authorization: Authorized to work in US on full time basis

OBJECTIVE

A full time position in machine learning and/or computer vision research and software development in a challenging and creative environment.

EDUCATION

PhD in Computer Science *Sep 2006 – to date*
University of Central Florida (UCF), US *Major GPA: 3.88*

Bachelor of Science *Sep 2001 – Jun 2005*
Double Major in Computer Science and Mathematics *Computer Science GPA: 3.40*
Lahore University of Management Sciences (LUMS), Pakistan *Mathematics GPA: 3.70*

JOB EXPERIENCE

Software Engineer (Intern) *June 2007 – Aug 2007*
Siemens Power Generation Inc., FL, US

Generator Engineering Computing Group

- Worked with the backend of the Siemens Integrated Design (SID) Environment.
- Ported SID methods to multiple platforms (Unix / Linux / MS-Windows)
- Tested SID methods on a different compiler (G95) and applied unit conversion (USCS↔SI)

Software Engineer *Jul 2005 – Aug 2006*
Palmchip Pakistan (PVT) Limited, Lahore, Pakistan

Protocol Sequence Re-player Project

- Worked with the network security applications team on a protocol analyzer tool namely Protocol Sequence Re-player (PSR).
- Tool helped detect malicious behavior for LAN protocols including proprietary protocols for Windows, Linux and UNIX.
- Developed and documented the X Display Manager Control Protocol (XDMCP), X Windows 11 (X11), File Transfer Protocol (FTP) and Windows Remote Registry (WinReg) plug-ins.

RESEARCH AND TEACHING EXPERIENCE

School of Engineering and Computer Science, University of Central Florida (UCF)

- *Graduate Research Assistant (GRA)*, Computer Vision Lab II *May 2008 – to date*
- *Graduate Teaching Assistant (GTA)*, Discrete Mathematics *Aug 2011 – to date*
- *Graduate Teaching Assistant (GTA)*, Operating Systems *Jan 2008 – Apr 2008*
- *Graduate Teaching Assistant (GTA)*, Numerical Calculus *Aug 2007 – Dec 2007*
- *Graduate Teaching Assistant (GTA)*, Programming in C *May 2007 – Aug 2007*
- *Graduate Teaching Assistant (GTA)*, Computer Science I *Jan 2007 – Apr 2007*
- *Graduate Teaching Assistant (GTA)*, Programming in C *Aug 2006 – Dec 2006*

Department of Mathematics, Lahore University of Management Sciences (LUMS)

- *Teaching Assistant (TA)*, Linear Algebra *Mar 2005 – Jun 2005*
- *Teaching Assistant (TA)*, Ordinary Differential Equations *Sept 2004 – Dec 2004*

PUBLICATIONS

- **Measuring and Reducing Latency when Recognizing Actions**
S. Z. Masood , C. Ellis, A. Nagaraja, M. F. Tappen, J. J. LaViola Jr. and R. Sukthankar
Proceedings of IEEE International Conference on Computer Vision (ICCV) Workshops, 2011.
- **Correcting Cuboid Corruption for Action Recognition in Complex Environment**
S. Z. Masood , A. Nagaraja, N. Khan, J. Zhu, and M. F. Tappen.
Proceedings of IEEE International Conference on Computer Vision (ICCV) Workshops, 2011.
- **Learning to Recognize Shadows in Monochromatic Natural Images**
J. Zhu, K. Samuel, S. Z. Masood and M. F. Tappen.
Proceedings of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2010.
- **Automatic Correction of Saturated Regions in Photographs using Cross-Channel Correlation.**
S. Z. Masood, J. Zhu and M. F. Tappen.
Computer Graphics Forum (CGF), The International Journal of the Eurographics Association, 2009.

GRADUATE RESEARCH PROJECTS

Recognizing People Using Social Network

- Analyzing the usefulness of information available through social network communities for recognizing people in photographs.

Content Based Copy Detection, TRECVID 2008

- Developed an algorithm for detecting picture-in-picture video content.
- Idea was based on detecting strong and persistent edges throughout the video.

Colorization of Grayscale Images

- Implemented a tool for the purpose of adding colors to grayscale images.
- Developed on the idea presented by R.Irony, D.Cohen-Or, D.Lischinski in “Colorization by Example”.

SELECTED UNDERGRADUATE PROJECTS

Changing Facial Expressions in Images/Videos (*Senior Year Project*)

- Developed tool for changing facial expressions of people in still images and videos
- Basic concepts involved face detection, warping, fitting 2D mask, and frame-by-frame tracking of points in videos

Hospital Management System

- Developed automated system for hospital management
- Functionalities included scheduling duties, patient histories records and inventory stock management of hospital pharmacy

Automated Adaptive Testing

- Created desktop application for automated adaptive testing similar to Educational Testing Service (*ETS*) for GRE
- Developed front end in Java and used Oracle for maintaining the database

RELATED SKILLS

Programming Languages / Software Applications / Tools / Libraries

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| ▪ C/C++ | ▪ Matlab | ▪ Microsoft Office |
| ▪ Java | ▪ OpenCV | ▪ OpenOffice |
| ▪ Python | ▪ OpenGL | |

HONORS & AWARDS

Placed on the Deans Honor list for maintaining a GPA of 3.60 and above

September 2001 – July 2002