Rao Muhammad Umer

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http://raoumer.github.io Sahiwal, Punjab,
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Education

Nov 14 - Oct 16	**MS in Computer Science**, *Pakistan Institute of Engineering and Applied Sciences*, Nilore, Islamabad, Pakistan. Area: Computational Intelligence and Machine Learning Cgpa: 3.45/4.0
Sep 10 - Oct 14	**BSc. in Computer Systems Engineering**, *The Islamia University of Bahawalpur*, Bahawalpur, Pakistan. Major Subjects: AI, Parallel and Distributed Computing, Image Processing Cgpa: 3.82/4.0
Sep 08 - Sep 10	**FSc. in Pre-Engineering**, *Government Post Graduate College*, Sahiwal, Pakistan. Major Subjects: Mathematics, Physics, Chemistry Percentage average: 86%, 943/1100 Marks.
Mar 06 - Aug 08	**Matriculation in Science**, *Lasani Public High School*, Sahiwal, Pakistan. Major Subjects: Mathematics, Physics, Chemistry, Biology Percentage average: 92%, 783/850 Marks.

Research Interests

Computer Vision, Machine Learning, Deep Learning, Data Science, Big Data Analytics, Natural Language Processing, Information Retrieval and Data Mining, High Performance Computing.

Research Experience

Jun 16 - Oct 16	**MS Thesis**, *Pakistan Institute of Engineering and Applied Sciences*,Islamabad, Pakistan. • Deep Web Extractor (DWX): Content Discovery From Deep Web Using Large Scale Data Analytics Paradigm • Techniques: supervised learning, classification, structured learning • Data Size: 68 MB (Analyzed Web forms dataset) & 1 GB (Raw Webpages Dataset)
Sep 13 - Sep 14	**Technical Report**, *The Islamia University of Bahawalpur*, Bahawalpur, Pakistan. • Spam Filtering System: Malicious Email Detection and Filtering System Using Bayesian Machine Learning Algorithm • Techniques: supervised learning, Bayesian learning, classification • Data Size: 15 MB (Analyzed spam & non-spam emails dataset) • Led a team of 4 undergrad Fellow to develop spam filtering system

Teaching Experience

Oct 16 - Cont.	**Lecturer**, *Department of CS & IT, The University of Lahore*, Lahore, Pakistan. Summer 2017: • Data Structures and Algorithms (CS-2112) Spring 2017: • Digital Logic Design (CS-4349) • Business Computing (CS-1010) Fall 2016: • Programming Fundamentals - I (CS-1012) • Introduction to Information and Communication Technologies (CS-1010) • Digital Logic Design (CS-4349) Note: All taught courses link is available at: http://raoumer.github.io/courses.html

Writing

APR 10, 2017	**Open Data Resources For Data Science Research**, `http://raoumer.github.io/blog_posts/data_sources.html`.
MAR 11, 2017	**Current Machine Learning research directions**, `http://raoumer.github.io/blog_posts/ml_research_problems.html`.
JAN 16, 2017	**Building Machine Learning Systems with Python**, `http://raoumer.github.io/blog_posts/building_ML_model.html`.
DEC 19, 2016	**Data Science Industrial Roles: Who Does What?**, `http://raoumer.github.io/blog_posts/ds_industry_roles.html`.
AUG 06, 2016	**Deploying Data Apps with Flask, Github and Heroku**, `http://raoumer.github.io/blog_posts/webappdev.html`.
JUN 18, 2016	**The Deep Web**, `http://raoumer.github.io/blog_posts/deep_web.html`.

Talks

AUG 16	**Deep Learning & GPUs**, *Introduction to DNNs workshop, Pakistan Institute of Engineering and Applied Sciences*, Islamabad, Pakistan.
FEB 16	**Implementation of Linear Regression and Multi-variate Regression on GPU**, *GPU Computing workshop, Pakistan Institute of Engineering and Applied Sciences*, Islamabad, Pakistan.

Open Source Projects

`dwx`	Deep Web Extractor System.	`http://raoumer.github.io/dwx`
`doccatpredapp`	Document's Category Predictor Webapp.	`http://doccategorypredictor.herokuapp.com`
`docWebClf`	Documents & Webpages Classification.	`http://raoumer.github.io/docs_classification`
`regrGPU`	Linear & Multiple Regression on GPU.	`http://raoumer.github.io/GPU-Workshop-PIEAS-2016`

Honors and Awards

OCT 16	**Best MS Thesis Award** , *from Department of Computer and Information Sciences, PIEAS, Islamabad, Pakistan.*
NOV 14 - OCT 16	**PIEAS Fellowship by PIEAS IT-Endowment Fund**,*sponsored by Higher Education Commission(HEC) for MS Computer Science.*
SEP 10 - SEP 14	**Fully Funded National ICT Scholarship**, *by National ICT R & D Fund for BSc. Computer Systems Engineering.*
JUN 11 - JUN 14	**Position Scholarship**, *by University College of Engineering and Technology, The Islamia University of Bahawalpur for excellent academic performance throughout undergraduate degree.*
SEP 10 - SEP 14	**Merit Scholarship**, *by Punjab Educational Endowment Fund(PEEF) for excellent academic performance in higher secondary school examination.*
OCT 08 - AUG 10	**Merit Scholarship**, *by Multan Board of Intermediate and Secondary Education for excellent academic performance in secondary school examination.*
AUG 06 - AUG 08	**Merit Scholarship**, *by Multan Board of Intermediate and Secondary Education for excellent academic performance in District level school examination.*

Workshops & Trainings

Nov 01 - 03, 2016	**Faculty Development Training**, *Contents:" Teaching methodology, Curriculum Designing, Assessment "*, The University of Lahore, Lahore, Pakistan.
Sep 15 - 16, 2016	**Deep Learning**, *Take part as a resource person*, Department of Computer & Information Sciences, PIEAS, Islamabad, Pakistan.
Feb 15 - 19, 2016	**General Purpose Computation on GPUs using CUDA C**, *Take part as a resource person*, Department of Computer & Information Sciences, PIEAS, Islamabad, Pakistan.
Jun 22 - July 9, 2015	**Python Programming in Engineering & Applied Sciences**, *Take part as a student*, Department of Computer & Information Sciences, PIEAS, Islamabad, Pakistan.
Jun 01 - 15, 2013	**LAMP (Linux, Apache, MySQL, PHP) Server**, *Take part as a student*, Department of Computer System & Electronics Engineering, The Islamia University of Bahawalpur, Bahawalpur, Pakistan.

Skills

Languages	● Urdu: Native	● English: Fluent
Hobbies	● Cricket	● Reading Newspaper Columns
Programming	Python, C/C++, Java.	
Scientific Software	Theano, Scikits-learn, Scipy, Numpy, IPython, Jupyter Notebook, Matplotlib, Flask, Pandas, Anaconda Python, Heroku, Git, Latex.	
Computer Skills	Experienced in managing Linux and Windows systems.	

Voluntary Work

Sep 12 - May 14	**Member**, *Blood Donating Society*, The Islamia University of Bahawalpur, Bahawalpur, Pakistan.
Nov 08 - May 10	**Decision Committee Member**, *College Gardening and Other Infrastructure Maintenance*, Govt. Post Graduate College, Sahiwal, Pakistan.

References

Dr. Muhammad Abid Mughal
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Nilore, Islamabad, Pakistan.
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