

RAO MUHAMMAD UMER

engr.raoumer943@gmail.com
muhammad.umer@cs.uol.edu.pk
http://raoumer.github.io

+92 336 7675246

Sahiwal, Punjab,
Pakistan.

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

Data Science, Big Data Analytics, Machine Learning, Deep Learning, 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.
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)

Writing

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

Talks

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

Open Source Projects

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

Workshops & Trainings

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

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
Department of Computer Science,
Pakistan Institute of Engineering and
Applied Sciences,
Nilore, Islamabad, Pakistan.
✉ mabidm@pieas.edu.pk

Dr. Asifullah Khan
Department of Computer Science,
Pakistan Institute of Engineering and
Applied Sciences,
Nilore, Islamabad, Pakistan.
✉ asif@pieas.edu.pk

Dr. Fayyaz-ul-Amir
Department of Computer Science,
Pakistan Institute of Engineering and
Applied Sciences,
Nilore, Islamabad, Pakistan.
✉ afsar@pieas.edu.pk