Ref: Dr. Farookh Khadeer Hussain, UTS

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ALKA VISHWA

Objective

Seeking research position that offers opportunities for academic & professional growth in Software Engineering & computing. As a PhD research scholar looking to further career growth in Blockchain, Trust management, cloud computing or data analytics.

Synopsis

- Pursuing Ph.D from University of Technology, Sydney with exposure to blockchain and smart contracts.
- M. Tech. in Computer Engineering from, Gyan Vihar University, Jaipur, with exposure to neural network technologies, MATLAB, Java, DBMS etc.
- Have Published 3 National and 8 International computer science research papers.
- Have published books under 2 International and 1 National publication banners.
- Have 8 years of experience in Academics, as Assistant Professor in computer engineering.
- Currently working as a **member of CSI** (Computer Society Of India).
- Pursuing a **professional membership** of ISTE (Indian Society for Technical Education).
- Effective communication, collaboration & interpersonal skills with proficiency in grasping new technical concepts quickly and utilizing them in an effective manner.
- Executed various research projects using Neural Network, MATLAB, VB 6.0, Java, MS SQL Server 2005, etc.

Technical Skills

- Operating Systems: Windows, Mac OS X, UNIX, Linux
- Programming Languages: C, C++, Python, Shell Scripting, My SQL, Machine Learning

Professional Experience (8+ years in Academics)

Time Span: July 2017- Present Institution: University of Technology, Sydney Designation: Casual Academic Lecturer and Tutor/Research Associate Subjects Teaching: Software Development Fundamentals Roles & Responsibilities:

- Research Associate of Project "Sentinel" with UTS and NSW Fair Trading
- Preparing and delivering lectures, labs and conducting tutorials.
- Grading assignment papers.

Time Span: July 2014- July 2016 Institution: DYPSOET, Lohegaon, Pune Designation: Assistant Professor of Computer Engineering Department Subjects Taught: Advanced UNIX Programming, Wireless Communication Roles & Responsibilities:

- Project coordinator of many research projects related to cloud computing, data mining etc.
- Preparing and delivering lectures, and conducting tutorials, seminars and laboratory sessions
- Organized & managed cultural and technical events
- Organized academic workshops.
- Graded term papers, final examinations and university examination.
- Active faculty coordinator of National Entrepreneurship Network(NEN)

Time Span: July 2010- June 2014

Institution: International Institute of Management Engineering and Technology, Jaipur. Designation: Assistant Professor & Deputy HOD of Computer Engineering Department Subjects Taught: Data structures & Algorithms, Theory of Computation, Computer Architecture, Optimization Techniques, Linux and UML & Computer Graphics.

Roles & Responsibilities:

- Project coordinator of Research projects and published many research papers.
- Organized & managed cultural and technical events as Head of the Event Organizing Committee.
- Active member of Admission Cell.
- Conducted academic counselling for students.
- Faculty Mentor of national entrepreneurship network (NEN).
- Editor, college magazine/newsletter.
- Organized academic workshops and industrial tours.
- Graded term papers, final examinations and university examination.

Time Span: Aug 2009-July 2010

Institution: Poornima Institute of Engineering& Technology, Jaipur. Designation: Assistant Professor & Deputy HOD of IT department

Subjects Taught: System Software Engineering, Theory of Computation, Computer Architecture, Embedded Systems &Distributed Systems.

Roles & Responsibilities:

- Project coordinator and organized national conference.
- Organized & managed cultural and technical events as Head of the Event Organizing Committee.
- Published departmental newsletters (quarterly) as editor.
- Organized academic workshops and industrial tours.
- Faculty Mentor of national entrepreneurship network(NEN).

Time Span: July 2008- July 2009

Institution: Government Engineering College, Ajmer Designation: Lecturer

Subjects Taught: Data structures & Algorithms, Theory of Computation, Computer Architecture, Embedded Systems.

Research Papers

- April 2016, Privacy Preserving using Data Partitioning Technique for Secure Cloud Storage, published in International Journal of Computer Applications(IJCA) (0975 8887), Volume 116 No. 16.
- May 2015, Public Auditing Security Scheme To Preserving Privacy For Secure Cloud Storage, presented in cPGCON-2015, Fourth Post Graduate Conference for Computer Engineering students at MET Bhujbal Knowledge City Nashik.
- May 2015, Domain clustering using Adaptive pre-processing, presented in cPGCON-2015, Fourth Post Graduate Conference for Computer Engineering students at MET, Bhujbal Knowledge City Nashik.
- May 2015, Identification and classification of web pages with specified domain, published in International journal of computer application, 973-93-80886-80-6, Volume 118 No. 11.
- Nov 2014, A Review of Domain Clustering Using Adaptive Pre-processing, published in International Journal of Science & Research' vol. 3, issue 11.
- **Proposed model for Requirement Engineering & Risk Analysis,** presented at The National Conference on Advancements in Information, Computer and Communication, 23 mar, 2013.
- Nanotechnology Method Comparison for Early Detection of Cancer, published in International Journal of Intelligent system and applications' vol. 5, issue 3, pp. 58-65.
- June 2012, Modified Method for Denoising the Ultrasound Images by Wavelet Threshold, published in International Journal of Intelligent system and applications' vol. 4, issue 6, pp. 25-30.
- Feb 2012, Speckle noise reduction in ultrasound images using wavelet threshold, Published in International Journal of Advanced Research in Computer Science and Software Engineering' vol. 2, issue 2.
- Dec 2011, Classification of Arrhythmic ECG data using Machine Learning Techniques, Published in International journal of computer science information Technology & securities' vol. 2, issue 1, pp-153-163.
- Sept 2011, Pre-diagnosis of lung cancer using feed forward ANN, Published in International Journal of Computer Science and Engineering" Vol 3, issue 9.
- Improving the quality of communication network, presented at PIET, Jaipur in 2009.

Research Projects

Project: "Sentinel-Risk and Cost to Government of Not Having Unified Data" with UTS and NSW Fair Trading

Time Span: July 2017- present

Tool Used- SQL Server, JAVA script

Location: University of Technology, Sydney

Description: -The project compares many datasets across Australia. This mostly involving the collection, collation and cleaning (Manipulation) of the data enabling us to compare and analyse. From this we can discover suspect transactions in the Automotive and many other

industries. We compare this to the results we obtained from the NSPP (modified data), the difference gives us a measure of cost and risk to Government.

Project: Diagnosis of Arrhythmia using ECG signal classification by neural networks Time Span: 6 Months Tool Used: MATLAB

Location: Gyan Vihar University, Jaipur, India

Description: -The project concentrates on the information sets of Arrhythmia (a subclass of the cardiovascular disease). Objective of this project is to underline the concept wherein the machine learning techniques can be applied to the information sets of ECG to improve the classification of the cardiovascular diseases. Some of the machine learning techniques and respective approaches described here with-in performs information evaluation in terms of the feature set employed, class of cardiovascular disease under consideration & their respective classification accuracy. This project avails the capability of Artificial Neural Network Techniques or ANN to analyze information of the patient records suffering from cardiovascular diseases & draws classification, that whether the patient is suffering from arrhythmia or not. Intention of the project is to add value to diagnostic process involved in medical science to help improve our understanding & so the treatment process, by introducing another technical dimension to it.

Project: Pre-Diagnosis of Lung Cancer Using Feed Forward Neural Network And Back
Propagation Algorithm
Time Span: 6 Months
Tool Used: MATLAB
Location: International Institute of Management Engineering and Technology, Jaipur, India
Description: - This project provides a Feed Forward Artificial Neural Network Model for early detection of lung cancer. The model consists of an input layer, a hidden layer and an output layer. The network is trained with one hidden layer and one output layer by giving twelve inputs. One of the most common forms of medical malpractices globally is an error in diagnosis. The project provides a formula for Error Detection and on the basis of error weights are adjusted and system is improved. Aim of the project is to propose a model for early detection and correct diagnosis of the

Education

• Pursuing Ph.D. from University of Technology, Sydney.

disease which will help the doctor in saving the life of the patient.

- M. Tech. in Computer Engineering from, Gyan Vihar University, Jaipur, in 2013, with CGPA score of 7.86/10.
- B.E. in Computer Science & Engineering from, Rajasthan University Jaipur, in 2008, with 73%.
- 12th from RBSE in 2003 with 79%.
- 10th from RBSE in 2001 with 82%.

Books Published

- **Computer Architecture and organization,** published under the banner of I.K. International publication. Delhi.
- Lung Cancer: Pre-diagnosis using ANN, published by Lambert Academic Publishing, Germany.
- **Pre-diagnosis of Arrhythmia- An ANN approach,** published by Lambert Academic Publishing, Germany.

Extra-Curricular Activities

- Runners-up in Inter College Volleyball Championship held at B.I.T, Bijnaur.
- Winner in Inter School Basketball Championship held at Ajmer.

Personal Information

Date of Birth:	15Apr 1985
Nationality:	Indian
Passport:	Yes
Language Known:	English, Hindi
Residency Status:	India (Permanent) & Australia (Permanent)
Valid Visa:	Australia