HIMAT SHAH | Curriculum Vitae

Contact Information

Email: himat.shah@centria.fi
Phone: +358 465 840099
Address: Lukkarinkatu 2 as 15, Ylivieska 84100, Finland

Status:: Ph.D. in Computer Science, Data Scientist
Fields:: Machine Learning, Data Analysis, AI
Keyword Extraction
Tech:: Python, SQL, HTML, CSS, JavaScript,
React
Loves:: Programming, Teaching, Research, Supervising students

About Me

I am a dedicated AI and machine learning expert with a Ph.D. in Computer Science, currently serving as a Senior AI Expert at Centria University of Applied Sciences on the OptiWood project. My role involves analyzing wood industry data to drive insights and foster innovation in sustainable practices.

In addition, I work part-time as a lecturer at Kajaani University of Applied Sciences, where I teach Data Analysis and AI to master's students, guiding them through evening classes and self-study courses.

My journey into academia and industry is rooted in my passion for machine learning and data science. I completed my Ph.D. at the University of Eastern Finland's School of Computing in 2022, where I specialized in data science and web content mining. Within the machine learning group in Joensuu, I developed four advanced methods for keyword extraction, balancing language-dependent and independent approaches, thus solidifying my expertise in data-driven solutions.

I also contribute part-time to the Dining Flow project as a Senior Researcher at the University of Turku's Software Engineering Department, focusing on applying machine learning to extract actionable insights. This project highlights my commitment to leveraging machine learning and data science for real-world impact.

Previously, my career includes six years of teaching experience, having held the roles of Lecturer, Senior Lecturer, and Assistant Professor in Pakistan before transitioning to research. My journey from software development to academia and research has been fueled by a continuous drive to learn, innovate, and share knowledge.

Programming is both my profession and my passion; I devote much of my spare time to refining my coding skills and exploring new technologies. Known for my ability to view the broader system while diving into crucial details, I approach projects with a rigorous, detail-oriented mindset that prioritizes accuracy and effectiveness.

In my current roles, I aim to bridge academia and industry, continuously pushing the boundaries of machine learning and AI. I look forward to contributing to forward-thinking projects and innovative teams in Finland where I can apply my expertise and drive meaningful change.

Employment History

2024–Present **AI Expert**
Centria University of Applied Sciences, Finland

- Analyzing wood industry data for the OptiWood project.
- Contributes to data analysis and AI development.

2024 **Senior Researcher (Part-Time)**
University of Turku

- Worked on the Dining Flow project for insights.
- Focused on machine learning for data analysis.

2023–2024 **Senior Researcher (Full Time)**
University of Turku

- Contributed to machine learning and data science projects.
- Focused on data-driven insights for enhanced project outcomes.

2020–2022 **Database Programmer**
SiunSote Central Hospital, Joensuu, Finland

- Developed and managed databases to streamline hospital operations.
- Improved data management solutions for enhanced information accessibility.

2016–2018 **Assistant Professor (IT)**
QUEST, Pakistan

- Taught advanced IT courses, focusing on current industry standards.
- Played a key role in curriculum development and student mentorship.

2014–2016 **Lecturer (IT)**
QUEST, Pakistan

- Instructed foundational IT courses, focusing on core computer science topics.
- Guided students in hands-on projects and practical applications.

2013–2014 **Principal**
SZABIST, Pakistan

- Led academic and administrative operations, ensuring high standards of education.
- Managed faculty and curriculum development for effective learning outcomes.

2012–2013 **Counter Products**
ZTE, London, United Kingdom

- Oversaw product distribution and counter sales for efficient operations.
- Contributed to strategic sales planning and team coordination.

2009–2010 **Oracle Trainer**
SZABIST, IT Institute, Hyderabad, Pakistan

- Conducted Oracle training sessions for students and faculty, enhancing technical expertise.
- Developed training materials and curriculum tailored to Oracle technologies.

2007–2009 **Principal (IT)**
Community Technology Center, Noshahroferoze, Pakistan

- Led IT training and development initiatives for community programs.
- Managed center operations and curriculum to support local educational goals.

Education

- **Ph.D. in Computer Science** (2018–2022) University of Eastern Finland, Joensuu
  Specialization in machine learning; developed keyword extraction methods for web content mining.

- **Masters in Information Technology (IT)** (2014–2016) QUEST, Pakistan
  Focused on IT systems and applications.

- **MBA (Master of Business Administration)** (2010–2013) University of Wales, Cardiff, United Kingdom
  Gained expertise in business management.

- **Postgraduate Diploma (PGD) Level-7** (2010) City College of London (CLC), United Kingdom
  Advanced studies in business and management.

- **Bachelor of Science in Computer Science** (2004–2008) University of Sindh, Jamshoro, Pakistan
  Foundation in computer science and software engineering.

Skills

- **Machine Learning:** Python, R, NLP, C, NodeJS
- **Web Development:** HTML, CSS, JavaScript, React, React Native
- **Databases:** SQL Server, Oracle, MongoDB, Qlik Sense, PowerBI

Machine Learning Online Method

Online Keyword Extraction for Webpages:

- Hrank : http://cs.uef.fi/~himat/Hrank

- Drank: http://cs.uef.fi/~himat/Drank

- WebRank: http://cs.uef.fi/~himat/WebRank

- ACI-Rank: http://cs.uef.fi/~himat/ACI2

Certifications

- Oracle 10g DBA Certified (Certified by Oracle Corporation)

- IELTS Score: 6.5 (International English Language Testing System)

- GRE Score: 293/320 (Graduate Record Examination)

IT Trainings

Is Programming for Me?
TE-Office, Riviera School Joensuu
Duration: 13.2.2023—01.10.2023

Language/Tool	Months	Level	Status
Python	2.2	Advanced	Completed
HTML, CSS	1.0	Very Good	Completed
JavaScript	1.1	Very Good	Completed
PowerBI	0.6	Good	Completed
AWS Cloud	3.2	Very Good	Completed

Important Links

GitHub: https://github.com/adeelshah110

LinkedIn: https://linkedin.com/in/himatshah110

Webpage: http://cs.uef.fi/ himat/

Google Scholar: https://scholar.google.com/citations?user=UhLUHdcAAAAJhl=en

ResearchGate: https://www.researchgate.net/profile/Himat-Shah

Research Publications

Journal Papers

1. C. Zhou, C. Wang, H. Hassan, H. Shah, B. Huang, P. Fränti, "Bayesian Inference for Data-efficient, Explainable, and Safe Robotic Motion Planning: A Review," *arXiv preprint arXiv:2307.08024*, 2023.

2. H. Shah, S. Ahmed, A. Sathio, and A. Burdi, "W-rank: A Keyphrase Extraction Method for Webpage Based on Linguistics and DOM-base Features," *VAWKUM Transactions on Computer Sciences*, 2023. ISSN(e): 2308-8168, ISSN(p): 2411-6335.

3. H. Shah, P. Fränti, "Combining statistical, structural, and linguistic features for keyword extraction from web pages," *Journal of Applied Computing and Intelligence*, AIMS Press, 2022.

4. M. Shah, H. Pathan, H. Shah, and W. Shah, "Effects of SMS Texting on Academic Writing Skills of Undergraduate Students at a Public Sector University in Pakistan," *Journal of Literature, Languages and Linguistics*, 2021.

5. A. Khan, A. Burdi, S. Awan, H. Shah, "Image Segmentation Approach Using Python OpenCV to Detect Tuberculosis," *University of Sindh Journal*, 2019.

6. A. Laghari, H. He, S. Karim, H. Shah, K. Karn, "Quality of Experience Assessment of Video Quality in Social Clouds," *Wireless Communications and Mobile*, 2017.

Conference Papers

1. H. Shah, R. Mariescu-Istodor, P. Fränti, "WebRank: Language-Independent Extraction of Keywords from Webpages," in *IEEE International Conference on Progress in Informatics and Computing (PIC)*, IEEE, 2021.

2. H. Shah, M. Rezaei, P. Fränti, "DOM-based Keyword Extraction from Webpages," in *Proceedings of the International Conference on Artificial Intelligence, Information Processing and Cloud Computing (AI-IPCC)*, Sanya, China, Article No. 62, 2019.

3. H. Shah, M. U. S. Khan, P. Fränti, "Hrank: A Keywords Extraction Method from Web Pages Using POS Tags," in *IEEE International Conference on Industrial Informatics (INDIN)*, Helsinki, 2019.

Research Interests

- Keyword extraction for webpages

- Machine learning

- Topic modeling

- Webpage summarization

- Title extraction

- Time series forecasting for predicting daily restaurant customers

- Data analysis for wood finishing processing industry

Hobbies

- **Sports and Outdoor Activities:** Running, badminton, football, floorball, orienteering, marathons, ice swimming, F1 (driving in dreams), travelling.

- **Other Interests:** Cricket, music, volunteer work, socializing, event organizing, making friends, cooking.

References

Professor Pasi Fränti
School of Computing, University of Eastern Finland
Office: +358 (0)50 442 2265
E-mail: mailto:first.last@uef.fifirst.last@uef.fi

Amir Ijaz
Doctoral Researcher, Robotics and Autonomous Systems
Department of Computer Science, Turku University
E-mail: mailto:Amir.ijaz@utu.fiAmir.ijaz@utu.fi