# **Asim Munawar**

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## **Professional Summary**

Al leader with 15+ years of experience driving innovation across global R&D and enterprise initiatives. Experienced in leading cross-functional teams, shaping AI strategy, and delivering scalable, production-ready solutions. Actively contribute to advisory boards and serve as a frequent speaker on the future of Al. Known for building high-performing teams and aligning research with business goals to create measurable impact. Looking to bring this experience to a director or senior manager role focused on advancing AI capabilities and responsible innovation.

# **Executive Highlights**

- Built and led high-performing teams focused on advancing reasoning and agentic workflows via synthetic data generation and alignment techniques. Consistently delivered >30% performance gains across enterprise tasks, achieving results on par with leading proprietary models using efficient open-source models (3B-30B), now integrated into IBM's Granite series.
- Directed IBM's neuro-symbolic AI program, managing 50+ researchers across 7 globally distributed, cross-functional teams playing a key role in shaping IBM's long-term AI research and product strategy.
- Managed a team of 12+ researchers delivering production-grade AI solutions in robotics, acoustics, natural language processing, and computer vision—bridging the gap between cutting-edge research and real-world client applications.
- Advisor to national AI strategy center in Pakistan and generative AI institute/startup in the U.S. | Inventor of 20+ USPTO patents | Author of 80+ publications.
- Delivered 50+ keynote and invited talks at premier venues including IJCAI, ICSE, Dallas AI, and ACMSE; also invited to speak at several leading global universities. Active LinkedIn contributor with 14K+ professional followers.

# **Skills**

Management	Program & Project Management   Team Leadership   Talent Development   Conflict Resolution   Performance
	Management   Diversity & Inclusion
Leadership	Al strategy   Executive decision-making   Client engagement   Thought leadership   Change management   R&D
	leadership   Keynote Presentations   Board/advisory roles   Agile methodologies   Strategic Planning
Technical	AI/ML   Responsible AI & Ethics   Large Language Models (LLMs)   Synthetic Data Generation   AI evaluation
	API Augmented LLMs   Neuro-symbolic AI   NLP   Computer Vision   Automation

# **Work Experience**

IBM Research – Apr 2012 – Present (https://research.ibm.com/)

Relocated from IBM Research Tokyo to IBM TJ Watson Research Center, New York in Jan 2021. Progressed from a researcher to senior leadership roles with increasing global scope.

## Research Lead (Jan 2023 - Present)

- Led multiple initiatives to enhance reasoning, planning and agentic workflows in LLMs. Guiding a 20+ person crossfunctional team, we achieved >20% gains on standard reasoning benchmarks, and >30% on enterprise applications.
- Built a high-performing, diverse team contributing to top models in IBM's Granite series.
- Combined strategic oversight with technical leadership to push SOTA in multi-turn grounded reasoning.

Project Management | Tech Leadership | LLMs | RLHF/RLAIF | Reasoning | Synthetic Data | RAG

## Program Director for Neuro-Symbolic AI (Jul 2019 – Aug 2023)

- Co-led design and led implementation of IBM's neuro-symbolic AI program, overseeing 50+ researchers across 7 international teams.
- Drove breakthroughs in NLU with reinforcement learning and built a 6K+ member external community.
- Founded recurring global events that continue to shape neuro-symbolic AI research and strategy at IBM.

Program Management | Thought Leadership | Community Building | Strategy | Neuro-symbolic Al

#### Manager (Jan 2018 – Nov 2019)

- Managed a 12+ member research team working across NLP, robotics, computer vision, and acoustics.
- Oversaw hiring, mentoring, performance reviews, project planning, and client delivery for 5+ research and enterprise
- Acted as both technical and people lead, bridging research with business impact.

Team Leadership | Talent Development | Client Engagement | Cross-Domain Al

#### Senior Researcher (Apr 2012 – Jan 2018)

Joined as a Researcher in 2012 and was promoted to Senior Researcher in 2014 in recognition of technical leadership and innovation across Al domains

- Built simulation & testing platforms for vehicle systems; developed an emulator for IBM's TrueNorth neuromorphic chip
- As Senior Researcher, led projects in robotics middleware, neuro-symbolic AI, and precision industrial assembly with AI
- Founded a new team focused on applied AI research; co-led IBM GTO 2018 to drive grassroots innovation

Robotics | Deep learning | Computer Vision | Neuromorphic Computing | Al Applications | Strategic Transformation

## Advisory & Early Roles

- Executive Board Member Centaur AI (2023–Present): Advise on Gen AI strategy and responsible use of AI in industry
- SIAB Board Member NCAI Pakistan (2021–Present): Guide AI research direction and performance outputs
- Quality Assurance Engineer Digital Works, Japan (2010 2012): Developed automated testing of a DBMS
- Campus Ambassador <u>Sun Microsystems</u> (2008–2010): Led open-source engagement in Hokkaido University
- Web/Android Developer Self Employed (2006 2012)
- Design Engineer CARE (2003–2005): Built DSP/FPGA vehicle anti-theft tracking systems with GIS/VHF tech

#### Education

- Postdoc Hokkaido University, Japan (2011–2012): Designed academic cloud platform for research use
- Ph.D. Hokkaido University, Japan (2008–2011): Thesis on evolutionary algorithm parallelization
- M.Sc. Hokkaido University, Japan (2006–2008): Computer Science, Grade A+
- B.E. NUST, Pakistan (1999–2003): Computer Systems Engineering, CGPA 3.875/4.0

#### **Technical Contributions**

- 20+ US patents (Justia) | 80+ publications (Google scholar) | 3 Best paper awards
- 50+ keynote/invited talks and 12+ Al events organized over past 5 years
- 14k+ followers on LinkedIn | Lead 6k+ NSAI community
- Free AI lectures and slides at my website

#### Selected Awards & Credentials

Corporate Awards O-level award for Granite 3.0 (2024) | A-level award for API augmented LLMs (2024) | Manager's

Choice (x3) | Technical Master award | Eminence and Excellence award (x3) | Technical Expert award

| Sun Campus Ambassador of the month (2009)

Academic Honors MEXT scholarship for MS/PhD (2005-2011) | MOST scholarship for BE (1999-2003) | Won software

competitions (2000, 2004) | Won Softcom quiz competition (2002)

Certifications IBM Certified Manager (2020) | 10+ Acclaim certificates/badges

## **Additional Information**

Authorized to work in USA (permanent resident) | Japan (citizen) | Pakistan (POC holder)

Languages English (bilingual) | Urdu/Hindi (native) | Japanese (professional proficiency) | Punjabi (bilingual)

Further details can be found at <a href="https://asimmunawar.github.io/">https://asimmunawar.github.io/</a>