

Asim Munawar

✉ asimmunawar@gmail.com

☎ +1(914)484-8074

 [linkedin.com/in/asimmunawar](https://www.linkedin.com/in/asimmunawar)

 [youtube.com/@asimmunawar](https://www.youtube.com/@asimmunawar)

 x.com/asimunawar

Personal Information

Citizenship Japan
Authorized to work in USA (Green Card holder) | Japan | Pakistan
Languages English (bilingual proficiency) | Japanese (full professional proficiency – JLPT N2) | Urdu (native) | Hindi (native) | Punjabi (bilingual proficiency) | Arabic (beginner)

Professional Summary

An accomplished research lead, manager, and program director in the field of AI with 15+ years of experience of delivering numerous projects that demonstrated the transformative power of AI in a range of industries. Currently at IBM Research, I am spearheading the research on large language models alignment for enterprise applications.

Being a thought leader, I serve on advisory board of multiple organizations and often deliver keynote talks. My career has been characterized by a focus on driving growth and delivering results. I thrive in collaborative, fast-paced environments and I am skilled at building and leading high-performing teams. I am excited to explore new challenges and opportunities to make a meaningful impact in the world of AI.

Skills

Management Skills

People/Project/Program management | Strategic transformations | Agile methodologies | Recruiting | Board member | Client outreach | Lead organizer | Tech lead | Organizational and analytical skills | Keynote speaker

Technical Hands-on Skills

AI | Deep Learning | Large language models (LLMs) | RLHF/RLAIF | Synthetic Data Generation | Evaluation of LLMs | API Augmented LLMs | Python | Neuro-symbolic AI | NLP | Computer vision | Robotics | Acoustics | Time-series

Work Experience

IBM Research / Apr 2012 – to date

I joined IBM Research – Tokyo in April 2012. After working in Tokyo for almost 9 years, in Jan 2021, I relocated to IBM TJ Watson Research Center in New York. Over the course of my career at IBM, I have served in various positions, spanning from researcher to senior management.

Research Lead (Jan 2023 – To date)

Currently, I am at the forefront of a pivotal research initiative, steering a team of 15+ researchers to develop Language Model (LLM) alignment methods for enterprise applications based on Reinforcement Learning from Human Feedback and AI Feedback (RLHF/RLAIF). This project, centered on generating synthetic data and aligned models, focuses on enhancing RAG-based multi-turn chat applications grounded in documents. My leadership has been instrumental in successfully assembling a high-performing team comprising individuals from diverse backgrounds, resulting in the delivery of the top-performing model at IBM Research.

My responsibilities extend beyond team management to spearheading the development of RAG and reasoning capabilities with LLMs. Reasoning involves exploring ways to understand the intermediate steps leading to conclusions, adding a layer of interpretability. I am also engaged in a project aimed at API augmented LLMs, allowing them to dynamically call tool of choice at runtime.

This multifaceted role requires a combination of people management, technical leadership, and hands-on development skills. Recognized as one of the most significant projects within the organization, our objective is to surpass the state-of-the-art in multi-turn grounded chat, making this endeavor both challenging and impactful.

Project management | Tech lead | Python | LLMs | RLHF/RLAIF | Reasoning | Synthetic Data Generation | NLP | Agile methodologies

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

I helped design and implement the strategy for the next generation of AI. The neuro-symbolic AI initiative consisted of 50+ researchers working in over 7 teams worldwide. The team have already shown breakthrough results on NLU using neuro-symbolic AI. I played a lead role in inception and organization of IBM workshop and summer schools on neuro-symbolic AI (registered by 5000+ participants).

Program management | Keynotes | Event lead organizer | Strategic transformation | Neuro-symbolic AI | Organizational and analytical skills

Manager (Jan 2018 – Sep 2019)

My team had 12+ members. My responsibilities included hiring, technical lead, development plan for team members, leadership reviews, client engagements, project planning and delivery. Under my leadership, the team successfully delivered 10+ research and client projects.

People management | Technical lead | Recruiting | Client outreach | Python | NLP | Robotics | Computer vision | Acoustics

Senior Researcher (Oct 2014 – Jan 2018)

Technically lead various projects including robot middleware, neuro-symbolic approach to robotics, precise industrial assembly tasks with AI, and conversational robotics. I started a new team for applications of AI. I was co-lead for GTO 2018, annual activity to curate bottom-up ideas.

Strategic transformation | Technical lead | Project lead | Python | Deep learning | Applications of ML

Researcher (Apr 2012 – Oct 2014)

I contributed to a project for efficient simulation of whole vehicle by proposing and building a testing platform. I developed an emulator for IBM TrueNorth processor (neuromorphic computing chip). I contributed to several other computer vision projects.

Python | Computer vision | Deep learning | Neuromorphic computing

Current Role(s)

Executive Board member, Centaur AI, New York – Sept 2023 – to date

I am responsible to advise the non-profit institute on the part of strategy concerning generative AI.

Tech Advisory Board Member, Packt (Mumbai, India) – Remote / Apr 2023 – to date

As advisory board member, I contribute by sharing my unique perspective and insight into specific areas of my expertise.

SIAB Board Member, NCAI (Islamabad, Pakistan) – Remote / Apr 2021 – to date

I am member of Scientific and Industrial Advisory Board (SIAB) at National Center of Artificial Intelligence (NCAI). SIAB is the experts technical body overseeing the research direction and performance outputs of the National Center. The role of SIAB is to advise the National Steering Committee as well as the central administration of NCAI in matters pertaining to scientific and industrial research and development.

Campus Ambassador at Sun Microsystems (Tokyo, Japan) / Oct 2008 - Feb 2010

I worked remotely with Sun until it was acquired by Oracle. My main responsibilities were: 1) Creating and leading the open-source university meet up (OSUM) circle at Hokkaido University. 2) Hold monthly seminars to promote open-source technologies. 3) Help students learn and use open-source technologies.

Design Engineer at CARE (Islamabad, Pakistan) / Jun 2003 - Mar 2005

Developed DSP and FPGA based image matching system and GIS based antitheft vehicle tracking system using GSM/GPRS and VHF as redundant communication channels. Development of central monitoring center was also part of the project.

Education

Postdoc – Hokkaido University, Japan / Nov 2011 – Mar 2012

Designed experimental portal for the largest academic cloud platform in Japan

PhD – Graduate School of IT, Hokkaido University, Japan / Oct 2008 – Sep 2011

Thesis: Massive parallelization of Evolutionary Algorithms (a branch of AI with broad applications).

MSc – Graduate School of IT, Hokkaido University, Japan / Oct 2006 – Sep 2008

Computer science | Grade A+

Bachelor of Computer Systems Engineering – NUST, Pakistan / Dec 1999 – Jun 2003

CGPA: 3.875/4.0

Certifications

- 10+ [Acclaim certificates/badges](#)
- IBM Certified Manager (2020)
- Enterprise Design Thinking Practitioner (2017)
- Industrial robot safety certificate of completion, Occupational Health and Safety, Japan (2016)
- IBM SyNAPSE neuro-morphic chip boot camp, Almaden, USA (2014)
- Sun Certified Associate for Java Platform, Standard Edition (2010)

Recent Talks and Articles

- Interview by Don Monroe on the topic of “Neuro-Symbolic AI”, Communications of the ACM, October 2022
- “How a shopping mall trip inspired me to work in neuro-symbolic AI”, Careers in Computing, ACM Communications, May 2022
- [Keynotes](#): 4th Pakistan AI Summit 2023 | AI Techverse 2023/IEEE ICAI 2023 | IEEE ICAI 2022 | IEEE ICAI 2021 | Dallas AI Meetup (Society of 5k+ AI professionals), CSR Club University Cadi Ayyad.
- Science Slam on Safe Reinforcement Learning (in Japanese), IBM Think Japan, Tokyo Japan, June 2018

Technical Vitality

- 20+ US patents in AI and related areas ([LINK](#))
- 60+ peer-reviewed publications ([Google scholar](#))
- [Professional memberships](#): IEEE | ACM | RSJ (Robotics Society of Japan)
- [Recently organized events](#): IBM NS workshop | IBM NS summer school | KBRL – IJCAI 2020 | KBCG – IJCAI 2023 | DL in RSJ 2018/2019
- Patent evaluator at IBM from 2014-to date (AI related)

Selected Awards & Recognitions

[Best Paper Awards](#): SSII (2019) | IEEE SCC (July 2018) | SIG-ECF (Oct 2010)

[Awards at IBM](#): Invention Plateau-6 (2023) | Manager's Choice Awards (2014, 2015, 2019) | Technical Master (2017) | Eminence and Excellence award (2014, 2015, 2016) | Technical Expert (2014)

[Academic awards](#): MEXT scholarship for MS and PhD (2005-2011), MOST scholarship for BE (1999-2003) | Winner of software competition (2000, 2004) | Merit certificate for BE (2003) | Winner of Softcom quiz competition (2002)

[Other awards](#): Sun Campus Ambassador of the Month (March 2009)

References

Available upon request