

Shiwali Mohan

Principal AI Scientist | Intelligent agents & architectures | Reasoning in AI & Foundation Models | Human-Agent Collaboration

🏠 Seattle, WA | ✉️ shiwali.mohan@gmail.com | [Webpages](#) | [CV](#) | [Research Statement](#) | [Google Scholar](#) | [CoCoA](#)

EDUCATION

PHD, ARTIFICIAL INTELLIGENCE

UNIVERSITY OF MICHIGAN

2015 | Ann Arbor, MI

Thesis: From Verbs to Tasks - An Integrated Account of Learning Tasks from Situated Interactive Instruction

MASTER OF SCIENCE

UNIVERSITY OF MICHIGAN

2009 | Ann Arbor, MI

BACHELOR OF ENGINEERING

UNIVERSITY OF DELHI

2007 | New Delhi, India

SKILLS

TOOLS

Programming: Python

Generative AI: LangChain, AutoGen

ML: TensorFlow, HuggingFace

Statistics: R, Pandas, NumPy, SciPy

Reasoning frameworks: [PDDL](#), [Soar](#)

COMMUNICATION

Scientific articles: AI, HCI, HRI, Cognitive Science

Patent applications

Research/funding proposals

SERVICE

ADVISING

[Preeti Ramaraj](#), UM

[Will Hancock](#), Northwestern

[Vijay Marupudi](#), Georgia Tech

[Poorvesh Dongre](#), Virginia Tech

[Shreya Rajagopal](#), UM

COMMUNITY

Moderator: cs.AI @arxiv

Chair: ACS, AAAI-DC

SPC/PC: AAAI, IJCAI, ACM: IUI, HRI,

UpiComp, ICRA, IEEE RO-MAN

Reviewer: ACM TiiS, ACM TIST, ACM HRI, Autonomous Robots, UKRI

MEDIA

PRESS

IEEE Spectrum, 2021. [\[link\]](#)

Outside Magazine, 2017. [\[link\]](#)

SOCIAL

[in: shiwalimohan](#)

[t: shiwali_m](#)

EMPLOYMENT

SRI | FUTURE CONCEPTS (FORMERLY XEROX PARC)

Principal Computer Scientist, PARC/SRI

2022 – 2024 | Palo Alto, CA

Senior Member of Research Staff, PARC

2019 – 2022 | Palo Alto, CA

Member of Research Staff, PARC

2015 – 2019 | Palo Alto, CA

- Technical and business leader in research and applied AI science
- Raised and delivered on government and industry grants worth over \$10M USD
- Manages interdisciplinary, multi-organization teams of AI & ML scientists, HCI & UX researchers, experts (clinicians, psychologists, economists), and academics
- Over 50 publications in AI, ML, & HCI and 10 patents (awarded/pending)
- Invited speaker at AI, HCI, & robotics conferences and universities

[Analogical Minds](#) | [Michigan AI Rising Stars](#) | [Talking Robotics](#) | [Tech & Society @ UCB](#) | [Robotics Colloquium @ UW](#) | [MLUX](#) | [ACM IUI 2021](#)

EXPERIENCE

FUNDAMENTAL RESEARCH

Expert in agent architectures and sequential decision making. Adept at agent systems with AI planning, generative AI, LLMs, ML, and knowledge representation & reasoning

Adaptive Autonomy for Open Worlds | [DARPA SAIL-ON](#)

[AIJ 2024](#) | [ECAI 2024](#) | [AAMAS 2023](#) | [ICAPS 2023](#) | [ICAPS 2021](#)

- Principal investigator; built intelligent agents that can autonomously adapt to sudden, unexpected changes in their operational environment
- Invented model-space adaptation in AI planning agents to learn 10x faster than deep reinforcement learning (patent WIP)
- Led the only team to successfully deploy a research prototype to the client's operational environment

Teachable Autonomy | [DARPA GAILA](#), [AFOSR Open](#)

[US Patents 2023,24,21 + 2 pending](#) | [ICAPS 2024](#) | [RO-MAN 2021](#) | [ACS 2020](#) | [AAAI 2014](#) | [ACS 2014](#)

- Principal investigator; built intelligent agents that can learn new concepts and tasks from natural human teaching | [LLM+Planning demo](#)
- Invented AI architectures for learning from teaching dialog in physical machines.
- Won the [AAAI 2018 Blue Sky Award](#) for a framework for integrating statistical learning and knowledge-rich inference in a single architecture; given to work that can initiate significant new research directions
- Helped launch a new AI research subfield on [Interactive Task Learning](#)

APPLIED SCIENCE

Expert in Human-Centered AI/ML and Human-Machine Interaction. Adept at leveraging insights from psychology, economics, education to build AI systems.

Conversational Agents for Patient-centric Healthcare | Seeking funding from NIH

[HealthIUI @ACM IUI 2025](#)

- Leading generative AI agents research for patients' sensemaking of their reports
- Collaborating with UCSF clinicians for problem discovery and need identification

Coaching Agents for Healthy Behaviors | [NSF/NIH SCH](#)

[ACM TiiS 2021](#) | [ACM TiiS 2020](#) | [JMIR 2018](#) | [AAAI 2017](#) | [JMIR 2017](#)

- Envisioned and implemented intelligent agents for supporting people in developing healthy behaviors; in collaboration with Kaiser Permanente
- Deployed the only known AI system to have adaptive behavior over long timespans (6-8 weeks) in ecological settings (real-world studies)
- Innovated an iterative design process for collaborative AI systems

Agent-based Models for Sustainable Transportation | [ARPA-E TransNet](#)

[JAIR 2019](#) | [AIES 2019](#) | [US Patent 2023](#) | [US Patent 2021](#)

- Envisioned and implemented a multi-modal route planning system for expected energy minimization in transportation network for Los Angeles
- Built rational choice models with deep learning and integrated them in the system to influence people's choice