



AMRITA
VISHWA VIDYAPEETHAM

SCHOOL OF
SOCIAL & BEHAVIOURAL
SCIENCES
AMRITAPURI

CAN WE MAP THE EXACT NEURAL AND BIOMECHANICAL PATHWAYS OF SKILL ACQUISITION TO REVOLUTIONIZE VOCATIONAL TRAINING?

Ph.D. RESEARCH PROJECT

For over 15 years, AMMACHI Labs has empowered women across 21 Indian states through vocational training. Now, we are taking this to the next frontier with our **Skills Intelligence** project, supported by a DST CSRI Research Grant.

We are leveraging Neurotechnology, AI, XR, and Wearables to understand the cognitive and motor development trajectories of manual dexterity skills (like tailoring) from novice to expert. By understanding the underlying motor control synergies and cognitive load, we aim to build an AI-driven, multimodal training ecosystem that provides personalized, certifiable skill acquisition for India's unskilled labor force.

To help us drive this mission in its final funded year, we are hiring

2 Full-Time Researchers to join our interdisciplinary team under the guidance of our incredible advisors, Dr. Veena Nair (UW-Madison) and Dr. Praveen Pankajakshan (Urbankisaan)

SWIPE RIGHT





ROLE-1 NEUROSCIENCE RESEARCHER

- **FOCUS**

Design experiments using EEG and behavioral assessments to investigate cognitive processes, working memory, and cognitive load during skill acquisition

- **REQUIREMENTS**

Master's in Neuroscience, Cognitive Science, or Psychology with strong AI/ML and Python/MATLAB skills (EEGLAB experience preferred)



ROLE-2 BIOMECHANICS RESEARCHER

- **FOCUS**

Analyze human movement, motor synergies, and dexterous performance using motion capture systems to understand the transition from trial-and-error to automated expertise

- **REQUIREMENTS**

Master's in Biomechanics, Kinesiology, or Biomedical Engineering with strong Python/MATLAB skills (OpenSim experience preferred)

WHY JOIN US?

- **CUTTING-EDGE TECH**

Hands-on access to Rokoko Smartsuits, Tesla suits, Brain Products LiveAmp/E-Motiv EEGs, VR/Hololens, and High-Performance Computing

- **REAL-WORLD IMPACT**

Translate your research directly into industry pilots and field deployments for marginalized communities

- **ACCELERATED GROWTH**

Focus on a Q1 publication pipeline and collaborate with established international partners

SWIPE RIGHT





If you are passionate about bridging the gap between cutting-edge cognitive science & tangible workforce development, we want to **hear from you!**

**READY TO
APPLY?**



SCAN HERE