



GPS for Future of Work: AI Based Career Development and Transition of Displaced Workers

- Dongwon Lee, College of Information Sciences and Technology
- Amulya Yadav, College of Information Sciences and Technology
- Hyung Joon Yoon, College of Education
- Hamoon Ekhtiari, FutureFit AI

Abstract: This collaborative project between Penn State and FutureFit AI1 proposes an interdisciplinary and data-driven approach to building a “GPS for Future of Work” with a focus on mapping career transition pathways designed for both employers and employees severely impacted by automation and AI. By employing methods from computer science, career development, workforce training, and human capital management and using FutureFit AI’s unique dataset on employment demand and talent supply (with coverage across 200+ countries and territories, 30,000 skills, and more than 80,000 job titles), our integrative approach develops a suite of AI solutions to help the employees-at-risk to transition into jobs that have more promising career prospects and to ensure that employers are ready for effective employee career development by innovating HR practices and introducing ethical standard operating procedures. Throughout this seed project, preparing for two NSF grant submissions in 2021 and 2022, we will prioritize key workplace issues in future of work, identify key stakeholders and project partners, streamline research agenda through in-depth discussion in the planning meetings, and perform a preliminary study to obtain a proof-of-concept.