

WHY AN ALGORITHM?

- Low cost: budget-friendly to implement and run; IPL team supports pilot testing
- Easy to implement: seamless integration into existing processes, no need for program overhaul
- Easy to customize: promote any integration priority, like employment or income; set host country constraints and refugee or immigrants' preferences
- Universal: can be deployed in many different countries and contexts
- Dynamic: continually learns from new data and adjusts recommendations over time
- Human-centered: complements placement officers' expertise; helps immigrants make informed decisions

About IPL

IPL is a global hub for research and innovation in immigration policy. Using advanced methods of data analysis and research design, we measure the impact of immigration policies on a wide range of social, political, and economic outcomes. We partner with government agencies and service practitioners to translate new evidence into creative solutions, working to improve lives and strengthen host communities.

Matching People and Places

People who migrate from one country to another must make challenging, lifealtering decisions. Which route is the safest? Who in our family should be the ones to move? Where do I have the best chance at starting a new life?

AI-driven tools can transform the way we approach these questions, allowing us to combine insights from big data with the expertise of service providers and governments. IPL developed a first-of-its-kind algorithm to match asylum seekers, refugees, and immigrants to host communities where they are most likely to succeed.

The algorithm learns from data about past migrants (such as gender, country of origin, age, and level of education) and their integration outcomes (for example, how soon they were able to find employment, what types of jobs they found, and whether or not they later moved to a new location). It identifies synergies between personal characteristics and locations, develops models to predict how new arrivals will fare, and matches them to give each one the best opportunity.

After testing the algorithm on historical data, IPL researchers demonstrated that algorithmic matching could boost employment rates by 40-70 percent among refugees in the United States and asylum seekers in Switzerland. Both countries have launched pilot programs, and several others are in the early stages. The algorithm was published in the world's leading scientific journal, *Science*, and its open source code embodies our commitment to transparency.



PARTNERS

- Rockefeller Foundation
- Schmidt Futures
- Human-Centered Artificial Intelligence Initiative, Stanford University
- International Rescue Committee
- Lutheran Immigration and Refugee Service
- Swiss State Secretariat for Migration



www.immigrationlab.org

Long-Term Impact

Fiscal: When asylum seekers, refugees, and immigrants are employed and integrated into society, sooner and in greater numbers, governments have higher tax revenues and lower the costs of social services such as welfare subsidies and unemployment insurance payments.

Economic: By matching newcomers with places that act as an onramp toward integration, countries can unlock their potential to contribute to the economy. When governments facilitate integration, they also promote immigrants' financial independence, entrepreneurship, and social mobility.

Social: As immigrant integration improves, so does social cohesion. Failed or incomplete integration, meanwhile, paves the way for societal ills that may persist for generations, including inequality, political polarization, and threats to democracy.

Our Team

Kirk Bansak is IPL's data scientist. He will join the political science faculty at the University of California, San Diego, in the fall.

Jennifer Fei is the program manager leading IPL's global refugee portfolio and matching algorithm projects. She earned her Master's degree in international policy at Stanford University.

Jeremy Ferwerda is assistant professor of government at Dartmouth College. He received his Ph.D. in political science from MIT.

Jens Hainmueller, faculty co-director, is a professor in Stanford's Department of Political Science and Graduate School of Business. He is an expert on immigration attitudes, immigrant integration, and experimental research methods.

Dominik Hangartner, faculty co-director, is associate professor of public policy at ETH Zurich and in the Department of Government at the London School of Economics and Political Science.

Duncan Lawrence, IPL executive director, is a two-time Fulbright recipient and an expert on federal, state, and local immigration policies.

Joëlle Pianzola is executive director of the Public Policy Group and IPL at ETH Zurich. She holds a Ph.D. from the University of Lausanne.

Jeremy Weinstein, faculty co-director, is professor of political science at Stanford and a senior fellow in the Freeman Spogli Institute for International Studies. He served as Chief of Staff at the U.S. Mission to the United Nations and Director for Development and Democracy on the White House's National Security Council staff.