Seminar in the Economics of Science & Engineering

**DATE:** Friday, October 1 @ 10:30am EST | 4:30pm Oslo | 10:30pm China | 7:30am PST

**SPEAKER:** ​Michael J. Handel (BLS, DOL) ​

**TITLE:** ​​Occupational Projections, Automation, and the Future of Work​

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**ABSTRACT:
​**The impressive growth in the power of artificial intelligence since 2005 has spawned a raft of papers and analyses that seek to identify occupations threatened by automation in the near future.  The most widely cited estimate is that nearly half of all U.S. jobs are at risk of automation over a ten- to twenty-year period.  This literature explicitly rejects using recent historical experience or standard occupational projections methods, including those used by the U.S. Bureau of Labor Statistics (BLS), to understand possible future developments on the grounds that AI’s capabilities and the rapidity of its development are unprecedented.  This paper compares BLS occupational projections to the automation scenario, evaluates the track record of both approaches, and uses O\*NET ratings to measure the skill implications of observed and projected occupational shifts.  Analyses also examine issues related to other theories of skill-biased technological change raised by the recent automation literature.  Results support traditional occupational projections methodology, do not support extreme automation scenarios or any theory of accelerating skill trends, and do not support theories of skill polarization.**​**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**BIO:**
[​](https://growthlab.cid.harvard.edu/people/christian-chacua)[​Michael J. Handel](https://www.michaeljhandel.com/)​ is a Research Analyst​ at the​ Bureau of Labor Statistics, U.S. Department of Labor​. He ​received his PhD in Sociology from Harvard University.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_