# Will Middle Class Stand in the Middle of Nowhere? Assessing the Impact of Gig Economy on U.S. Labor Market

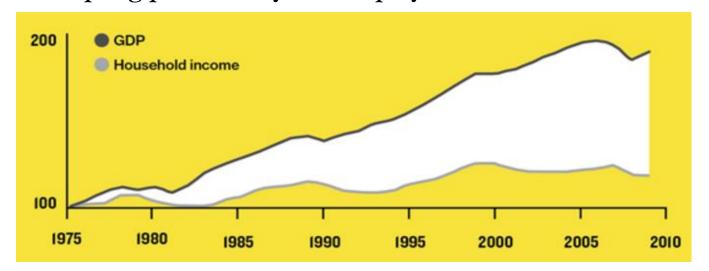
**Aaron Cheng** 

Fox School of Business, Temple University

acheng@temple.edu

#### **MOTIVATION**

#### ☐ Decoupling productivity and employment since 1980s



Source: David Rotman, "How Technology is Destroying Jobs", MIT Technology Review, June 12, 2013.

#### ☐ Skilled-biased Technological Change: A debate over 30 years

#### From economists' (e.g., Acemoglu and Autor, 2011)

<u>Canonical Model</u>: Technology *complements* skilled workers, *substitutes* low-skilled ones. <u>Recent Trends</u>: the "Polarization" of U.S. and European labor markets.

#### From information technology scholars' (e.g. Brynjolfsson and McAfee, 2012 &2014):

Average workers lose the race against machine due to their failure to keep up with cuttingedge technologies.

#### **MOTIVATION**

#### ☐ Gig Economy

An environment in which temporary positions are common and organizations contract with independent workers for short-term engagements. (Whatls.com)



#### ☐ Gig Economy and Labor Market

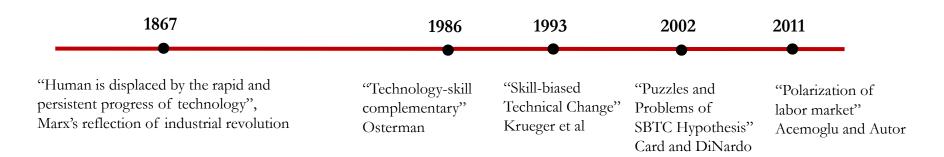
Gig economy better matches work force and jobs, and may revolutionize labor market (employment and structure of wage).

Really? If yes, how?

Specifically, I argue that gig economy shifts demand towards mid-skilled workers.

#### **THEORY**

☐ Economics: Technology and Labor Studies



#### Latest evidence and conjuncture:

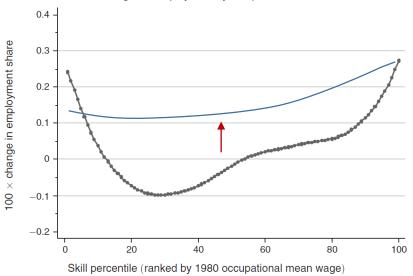
"polarization" of skill demands in which employment has expanded in high-wage and low-wage at the expense of middle-wage jobs.

#### ☐ Information technology/ Information Systems Literature

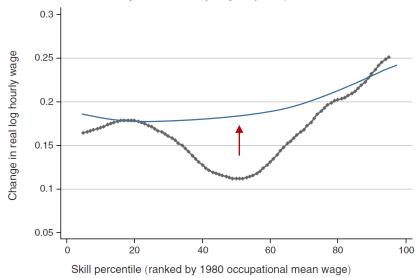
The Automate/ Informate/ Transformate role of IT in organization (Zuboff 1985, Schein 1992)

### **HYPOTHESIS**

Panel A. Smoothed changes in employment by skill percentile, 1980-2005



Panel B. Smoothed changes in real hourly wages by skill percentile, 1980–2005



**Note:** These figures are adapted by Autor & Dorn (2013). The blue line hypothesizes the changes in employment and real hourly wage by skill percentile from 2000 to 2015, which implied by Acemoglu & Autor (2011). The red arrow shows the flat trends of employment and income differentials across different levels of skill, which is against polarization hypotheses and may due to the proliferation of gig economy.

Rationale: Gig economy contributes more to mid-skilled workers than to two tails of labor market since (1) high skilled workers have better jobs and less motivations to work as gigs,

- (2) low-skilled workers have less resources and skills to meet the requirement to be gigs.
- H1: The prosperity of gig economy will decrease employment gap and income inequality between high-skilled/low-skilled and mid-skilled workers in an urban area.

## Thank You!