DATA SCIENCE FOR HUMAN CAPITAL MANAGEMENT

The 1st Data Science for Human Capital Management workshop

Collocated with IEEE International Conference on Data Mining (ICDM’17)
New Orleans, LA
November 18th, 2017

Organizers:
Faizan Javed
Ioana Marinescu
Mihai Rotaru
Mohammad Al Hasan
Human Capital Management

Systems and processes for attracting, developing and managing an organization's biggest asset: their people.

**inspired by the Goldman Sachs definition**
What is pre-hire Human Capital Management (HCM)?

**Candidate Discovery:**
job boards, job search, job matching, job aggregators, social recruiting

**Candidate Intelligence:**
assessments (skills, cultural fit, et al), digital interviews

**Candidate Management:**
Applicant Tracking Systems (ATS), CRMs

**Labor Market Analytics:**
hiring trends, supply & demand of labor, compensation data
What is post-hire Human Capital Management (HCM)?

**Talent Management:**
- Workforce planning (aligning needs of an organization with its workforce)
- Optimizing performance
- Retraining
- Identifying leaders
- Reduce/prevent voluntary employee attrition

**Payroll**
- Benefits administration (health insurance/wellness, retirement accounts, vacation/sick leave, ..)
- Time & attendance

**Learning Management**
As Skill Requirements Increase, More Manufacturing Jobs Go Unfilled

Number of open positions highest in 15 years, with many workers not possessing skills to do today's jobs

By Anna Louie Sussman
Sept. 1, 2016 8:41 a.m. ET

US ECONOMY

Job openings hit record high in June at 6.2 million

- Monthly jobs openings — a gauge of the U.S. economy that's closely watched by Fed Chair Janet Yellen — increased in June.
- The Bureau of Labor Statistics announced Tuesday the number of job openings was at 6.2 million for the month.
- The result is a record high for the Labor Department number.

Michael Sheetz | @thesheetztweetz
Tuesday, 8 Aug 2017 | 10:34 AM ET

JOBS, JOBS, JOBS!

JOBS CREATED IN FEBRUARY

235K 4.7%

190K 4.7

How AI Is Transforming the Workplace

Artificial intelligence is changing the way managers do their job—from who gets hired to how they’re evaluated to who gets promoted

Techs: Job Satisfaction Equals Increased Service Revenue

By Ken Strong - October 23, 2017

1
HCM market size is estimated at $131 billion!*

*SCIU, 2015
Program

3 invited talks

5 regular paper presentations (20 minutes + 5 minutes for Q&A)

6 short paper presentations (12 minutes + 3 minutes for Q&A)