

## Academic/Intellectual Advice:

- Societal Impacts (e.g., health, cybersecurity, green IT, privacy) > Academic Impacts (papers)
- IT (including CS, EE, MIS; information centric) > MIS
- CISE (computing, analytics; prescriptive) > SBE (social, behavioral, economics; descriptive)
- New (new applications, new technologies) > Old (existing, well-known)
- EQ (effort, attitude, time management, motivation, aspiration, discipline) > IQ (raw talents)

## The Business Analytics Intellectual Landscape:

### I. Major News Media and Scientific Publications (understanding the societal needs)

- The Economists (global, geopolitics), NYT (US), WSJ (global, business)
- Nature, Science (some in IT, e.g., deep learning, AI; network science)

### II. Major Industry Players/Labs (a global emerging IT landscape)

- FAANG: Facebook (social, facial recognition, AI), Amazon (e-commerce, recommender systems, logistics, cloud computing), Apple (mobile), Netflix (e-commerce, recommender systems), Google (SE, social, cloud computing, Brain, DeepMind)
- MI: Microsoft (AI, cloud computing), IBM (business analytics, cloud computing, AI/Watson)
- BATH: Baidu (SE, AI), Alibaba (e-commerce, m-commerce, AI), Tencent (social, m-commerce), Huawei (mobile, 5G, AI)

### III. Major Universities/Labs (check Google Scholar, DBLP, H-index)

- MIS: Arizona (H. Chen, Nunamaker), NYU (Tuzhilin), CMU
- CS: Berkeley (M. Jordan), Stanford (Andrew Ng, Feifei Li), Washington (O. Etzioni), UIUC (J. Han), UI Chicago (P. Yu), CMU, MIT; G. Hinton, Y. LeCun, Y. Bengio, I. Goodfellow (deep learning)

### IV. Major Federal Funding Agencies (UA/MIS funding \$200M)

- Research: NSF (STEM, \$6B), NIH (health, \$20B), DARPA (defense), IARPA (intelligence); UA/Eller/MIS Nunamker, H. Chen (\$150M); NSF CyberCorps SFS Program (UA/AZSecure, \$10M)
- Operational: NSA (cybersecurity), CIA, FBI, DOD, DHS; NSA/DHS CAE-CD, R, CO (UA/MIS)

### V. Major Professional Societies, Conferences & Journals (join ASAP)

- MIS: ICIS, AMCIS; MISQ, ISR, JMIS (top-3)
- ACM: ACM SIG (special interest group), SIGKDD, SIGIR, SIGCHI; ACM KDD, CACM, ACM TOIS
- IEEE Computer Society: IEEE ICDM, IEEE TKDE
- Deep/Machine Learning: NeruIPS, IC on Learning Representations, IC on Machine Learning
- Health Informatics: AMIA, JAMIA, JBI
- Cybersecurity: DefCon, BlackHat; ACM CCS, IEEE S&P, USENIX, IEEE ISI

### VI. Major Analytics Applications & Technologies (try ASAP)

- Applications: cybersecurity, health, e-commerce, social media, sports; drones, AV, VR, e-sports, facial recognition, smart city, 5G
- Technologies: data mining (structured), text mining, web mining, deep learning, adversarial learning, transfer learning, reinforcement learning