

Stevens Institute of Technology
Overview for New Jersey Big Data Alliance
Dr. David Belanger david.belanger@stevens.edu

1. **Education and Training:**
 - a. **Schools Involved in Big Data (all offer BS, MS, PhD Degrees):**
 - i. Schaefer School of Engineering & Science
 - ii. School of Systems & Enterprises
 - iii. Howe School of Technology Management
 - b. **Big Data Related New Programs:**
 - i. Quantitative Finance – B.S.
 - ii. Business Intelligence & Analysis – M.S.
 - iii. Cybersecurity – M.S.
 - iv. Business Intelligence & Analysis - Certificate
2. **Multidisciplinary Research Expertise:**
 - a. **Stevens' Strategic Disciplines:**
 - i. Finance
 - ii. Health & Medical
 - iii. Security/Intelligence
 - iv. Energy
 - v. STEM
 - b. **Big Data Related Research Clusters & Centers:**
 - i. Secure Systems Cluster
 - ii. Systems Engineering & Enterprise Management Cluster – UARC
 - iii. Center for Financial Systems: Hanlon Finance Lab
 - iv. Center for Decision Technologies
 - v. Center for Complex Systems & Enterprises (New)
 - c. **Some Big Data Related Research Foci:**
 - i. Social Networking Applied to Finance and Other Areas
 - ii. Health Care Partnerships
 - iii. Computer Visualization and Graphics Laboratory – Video Analysis
 - iv. Ocean Studies Lab
 - v. Sensor Networks
3. **Infrastructure (selected):**
 - a. Clustered High Performance Computing Facility – Computer Science / Visualization & Video Mining
 - b. Cray XE6
 - i. uRiKa, Northern Light, ...
 - c. Hanlon Financial Systems Lab
 - i. Bloomberg, Thompson Reuters, ICAP, OneTick, RealTick, GAIN, ...
 - d. Shared:
 - i. DoD HPC, Interdisciplinary HPCC of CUNY (Cray, SGI – Ocean Research)
4. **Partnerships**
 - a. A Long List of Research Partnerships and Alliances with Corporations across Finance, Telecom, Pharma, Health Care, and Government.
 - b. Business Intelligence & Analysis Advisory Board Membership (an example):
 - i. UBS, American Express, Aequus Technologies, DuPont, Diageo, Decision Viz, Google, EMC, SAS, IBM, Pfizer, Forest Labs, Doremus, MediaCom, NJ.com, Verizon Wireless, AT&T Research.