

Presented to Engineering College Council, Cornell University

Adam Shwartz, Director

March 2015



## Sandbox for Change Spearhead of Innovation Synergy

JACOBS INSTITUTE

## **CORNELL TECH**



## Response and Apology



## 30 Years From Now



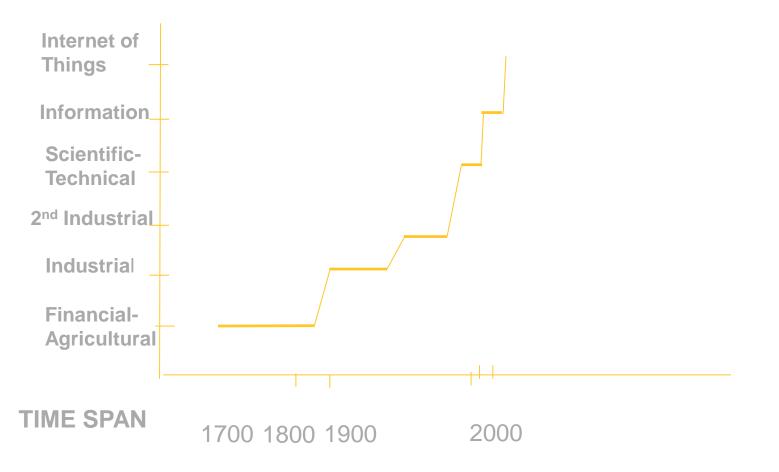


## Prediction is difficult, especially if it's about the future.

- Niels Bohr

## **Rate of Technological Advance**

#### **REVOLUTIONS**



JACOBS INSTITUTE

## 2 YEARS AGO

Skepticism around potential for success



**CORNELL TECH** 

Mission? Vision? Integration?



## TODAY

## Sandbox for Change Spearhead of Innovation Synergy

JACOBS

## **CORNELL TECH**



Shiri Azenkot Assistant Professor HCI, Accessibility



Uzi DeHann Director, Runway Program



Adam Shwartz Director, Jacobs Institute



Lihi Zelnik-Manor Visiting Assoc. Professor Computer Vision Mor Namaan Associate Professor at Cornell Tech Social Data



Yaron Kanza Visiting Asst. Professor Databases, GIS



Professor Cryptography, Security



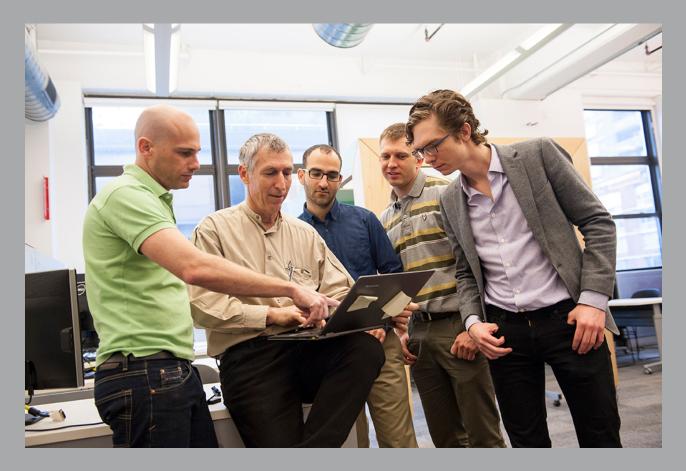
Shie Mannor Visiting Professor Machine Learning



Craig Gotsman Visiting Professor Geometric Computing



## **Runway Postdoctoral Startup Program**



Unique postdoctoral entrepreneurial program pioneering a novel Intellectual Property model

## PEOPLE

- 3 Tenure Track faculty
- 3 long term visitors
- 9 Runway postdocs
- 3 Postdocs
- 6 Ph.D.
- 12 MS in Information Systems Connective Media
- 4 Cornell, 4 Technion Board Members
- 1 Director
- 1 Admin (NYC), 1 Admin (Haifa)
- Administration integrated with Cornell Tech

## PROGRAMS

## Education

- MS-IS, Connective Media: 12, recruiting (20?)
- MS-IS, Health Tech: recruiting (6?)
- Runway: 9, recruiting (4?)
- Recruiting postdocs, PhD students

### Research

- Tenure Track Faculty: 3, recruiting (2-3?)
- Cooperation programs: grants (20 groups)
- Technion PhD supervision
- Cooperation programs: joint workshops (2), exchange of research graduate students



## Driver of change Driver of synergy within Cornell Tech



For Cornell, Technion and beyond





## Sandbox for Change Spearhead of Innovation Synergy

JACOBS

## **CORNELL TECH**



## PEOPLE

- 15 Tenure Track faculty
- 10 long-term visitors--including very long
- 10-20 Runway postdocs
- 15-30 Postdocs
- 60 Ph.D.
- 250 MS in Information Systems Connective Media, Health Tech, Built Environment



## NEW INITIATIVES

- New structure for collaborative appointments with Cornell Tech, Weill, Cornell, Technion
- New structure for Non-Tenure Track faculty

## PROGRAM CHANGES Education

- Expand focus of current MS in IS degrees; collaborate with partner institutions?
- Other academic structures to incorporate additional foci (For ex., Security)

- New Hubs?
- Strategically rethink Runway progam: Visiting Committee?
  - PhD students Change recruitment process?

• Joint classes: remote/on line/partial travel?

## PROGRAM CHANGES Research

- Broader research, in part facilitated by collaborative appointments
- Form CT/Cornell/ Technion/Weill interest groups

- Workshops, joint students, joint classes
- Leverage grant opportunities/philanthropy
  - Brainstorming "synergy"

## ENTREPRENEURSHIP

It is expected we will have:

 10-20 companies/year created by Runways, Researchers, and the 25 MS-IS graduates

• 100 experts/year – join pool talent

## SPECULATION

How is education done? Meaning of physical proximity? Meaning of "place of work"? Meaning of "travelling to work"? Predominance of disciplines SW/HW

Exact/human



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