

# Illinois Tech College of Computing Overview

LANCE FORTNOW

Illinois Tech



# Welcome Argonne Faculty



# College of Computing Started June 2020



**Vision:** Become the leading creator of computational talent, knowledge and innovation for Chicago and beyond.



**Mission:** Provide the students and faculty of Illinois Tech from all backgrounds and disciplines the best-in-class computational and data science platform to excel in academics and research in their respective fields.

# Departments

- ▶ **Computer Science** - Shlomo Argamon, Chair
  - ▶ High Performance Computing, AI/ML, Cybersecurity, software engineering, networking
- ▶ **Mathematics** – Chun Liu, Chair
  - ▶ Mathematical Finance/FinTech, Computational Science, Optimization, Statistics, Data Science
- ▶ **Information Technology and Management** – Calvin Nobles, Chair
  - ▶ Cybersecurity, Cloud, software development, IT Management
- ▶ **Industrial Technology and Management** – Pam Houser, Interim Director
  - ▶ Manufacturing, Supply Chain, Facilities, Construction



# Pillars

## Grow Tech

Play a leading role in growing the tech community both locally and globally through education and research.

## Infuse

Computing as a horizontal: Infuse computing education, research, tools and ideas into nearly every discipline, course and activity across campus

## All Students

To paraphrase Frank Gunsaulus's founding mission for the university: Provide every student, from all backgrounds, meaningful roles in a changing technological society



# DATA SCIENCE

**01**  
Business  
Understanding

**02**  
Data  
Mining

**03**  
Data  
Cleaning

**04**  
Data  
Exploration

**05**  
Feature  
Engineering

**06**  
Predictive  
Modeling

**07**  
Data  
Visualization





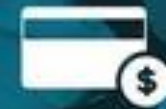
CYBERSECURITY



# DIGITAL TRANSFORMATION



# FINTECH



12%







# Partnerships

- ▶ Chicago - Government, P33, DPI, MxD, mHub, 1871
- ▶ Universities
  - ▶ Northwestern, U. Chicago, UIC
  - ▶ Medical: Rush, Rosalind-Franklin
  - ▶ Community Colleges: Olive-Harvey, Wright, Malcolm X
  - ▶ HBCUs: Rust College
- ▶ Companies – Accenture, Motorola, Siemens, DMG Mori
- ▶ National Labs – Argonne, Fermilab, Oak Ridge
- ▶ Federal – Military, DHS, NSF
- ▶ Board of Advisors



# Argonne Partnerships

- ▶ Joint research projects
- ▶ Joint appointments
  - ▶ Research and funding opportunities
  - ▶ Teaching opportunities
- ▶ Access to Argonne and Illinois Tech facilities
- ▶ Argonne-Illinois Tech Institute