



Introducing  
**CAREERS IN  
COMPUTING**



## AGENDA



**Seidenberg  
Programs**

**Career Paths  
in Computing**

**Specializations  
And Academics**

**Pace University  
Career  
Services  
And  
Advisement**





# Degree Programs

120  
credits

### **BS / BA COMPUTER SCIENCE**

An ability to analyze a problem and identify and define the computing requirements appropriate to its solution. Our CS majors code in languages including: JAVA, PHP, CSS, Ruby on Rails

### **BS - INFORMATION TECHNOLOGY**

IT majors are immersed in emerging areas in technology including Cybersecurity, Computer/ Digital Forensics, Big Data Analytics and Artificial Intelligence

### **BS - INFORMATION SYSTEMS**

Analyze large and complex hardware and software systems, using the data to make substantial contributions to business decision-making



## CAREER PATHS: POPULAR JOB TITLES

1010  
1010

# Computer Science

### BACHELOR DEGREE GRADUATES

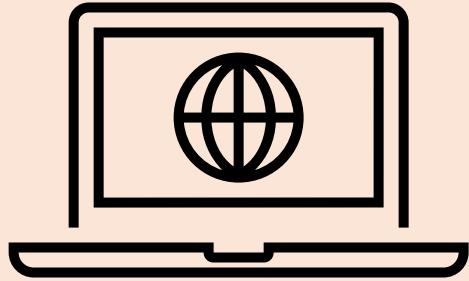
- Cybersecurity Analyst**
- Full Stack Developer**
- Engineering Analyst**
- Help desk Technician**
- Junior Web Developer**
- Junior Application Developer**
- Security Intern**
- Software Developer**
- System Analyst**
- UX Designer**

### MASTER'S DEGREE GRADUATES

- AI Developer**
- Business Intelligence Analyst**
- Cloud Engineer**
- Cybersecurity Engineer**
- Data Analysis**
- Data Scientist**
- DevOps Engineer**
- Senior Systems Engineer**
- Senior Web Designer / Web Developer**
- Senior UX Designer**



## CAREER PATHS: POPULAR JOB TITLES



# Information Systems

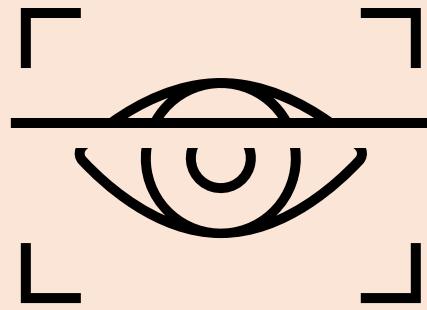
### BACHELOR DEGREE GRADUATES

**Business Analyst**  
**Intelligence Analyst**  
**Cybersecurity Analyst**  
**IT Help Desk Technician**  
**Systems Engineer**

**MASTER'S DEGREE GRADUATES**  
**Data Analysis**  
**Data Scientist**  
**DevOps Engineer**  
**Full Stack Developer**  
**Information Security Associate**  
**Network Engineer**  
**Project Manager**  
**Salesforce Business Analyst**  
**Software Developer/Engineer**  
**Systems Engineer**



## CAREER PATHS: POPULAR JOB TITLES



# Information Technology

### BACHELOR DEGREE GRADUATES

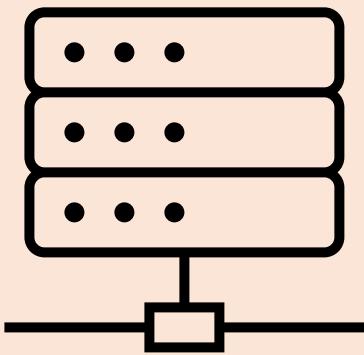
**Cybersecurity Engineer**  
**Data Analyst**  
**Desktop Engineer / Support**  
**Intelligence Analyst**  
**Information Architecture**  
**Information Security**  
**IT Support**  
**Jr Systems Engineer**  
**Network Administrator**  
**Software Developer**  
**UX/UI Engineer**

### MASTER'S DEGREE GRADUATES

**Ed Tech Support Engineer**  
**Information Systems Security**  
**Senior Cyber Risk Consultant**  
**Infrastructure Engineering Tools - Lead**  
**IT Engineer**  
**Lead Software Engineer**  
**Network Engineer**  
**Senior Systems Engineer**  
**Senior Technology Analyst**  
**Technical Project Manager**



## CAREER PATHS: POPULAR JOB TITLES



# Tele- communications

### BACHELOR DEGREE GRADUATES

**Data Center Support Lead**  
**Fiber Network Technician**  
**Fiber Optic Technician**  
**Field Engineer**  
**Maintenance Technician**  
**Network Support Specialist**  
**Network Technician**  
**Solutions Engineer**  
**Telecommunications Technical Associate**

### MASTER'S DEGREE GRADUATES

**Lead Cyber Security Analyst**  
**Principal Network Design Engineer**  
**Program Manager**  
**Senior Director**  
**Senior Specialist Network Support**  
**Systems Engineer**  
**Wireless Engineer**



SPECIALIZATION: CAREERS & ACADEMICS



# Software Developers and Engineers

Create and develop websites, computer programs, software and mobile applications.

**NY average salary**  
**\$115,010**

**National average salary**  
**\$107,510**



# Software Developers and Engineers

Create and develop websites, computer programs, software and mobile applications.

**NY average salary**  
**\$115,010**

## REQUIRED SKILLS

### Programming

Writing computer programs for various purposes.

### Systems Analysis

Determining how a system should work and how changes in conditions, operations, and the environment will affect outcomes.

### Systems Evaluation

Identifying measures or indicators of system performance and the actions needed to improve or correct performance, relative to the goals of the system.

### Judgment and Decision Making

Modifying software programs to improve performance.

### Languages and Development Software

Oracle Java, Python, Google AngularJS, HTML, Microsoft ASP.NET



SPECIALIZATION: CAREERS & ACADEMICS

PACE

3:05 P

# Software Developers and Engineers

Create and develop websites, computer programs, software and mobile applications.

NY average salary  
**\$115,010**

## RECOMMENDED PACE SEIDENBERG COURSES

CS 113

**Mathematical Structures for  
Computer Science**

CS 121, 122

**Intro to Programming I, II**

CIT 342

**Systems Analysis and Design**

CS 389

**Software Engineering**

CS 242

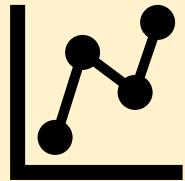
**Algorithms and Computing Theory**

CS 361

**Programming Languages and  
Implementation**



SPECIALIZATION: CAREERS & ACADEMICS



# Data Analysts

Collect and compile data to produce useful insights and identify trends. Data analysis provides quantitative and qualitative reasoning to support business decisions.

**NY average salary**  
**\$71,050**

**National average salary**  
**\$88,550**



# Data Analysts

Collect and compile data to produce useful insights and identify trends. Data analysis provides quantitative and qualitative reasoning to support business decisions.

NY average salary  
**\$71,050**

## REQUIRED SKILLS

### Critical Thinking

Using logic and reasoning to identify trends and patterns in dataset and synthesize current business intelligence or trend data to support recommendations for action.

### Communication

Communicate with customers, competitors, suppliers, professional organizations, or others to stay abreast of industry or business trends.

### Writing

Prepare analytical reports.

### Active Learning

Collect business intelligence data from available industry reports, public information, field reports, or purchased sources.

### Database management, query software

Apache Hadoop, MongoDB, Oracle PL/SQL, AWS, Microsoft Access



# Data Analysts

Collect and compile data to produce useful insights and identify trends. Data analysis provides quantitative and qualitative reasoning to support business decisions.

NY average salary  
**\$71,050**

## RECOMMENDED PACE SEIDENBERG COURSES

CIT 241

**Database Management Systems**

CIT 322

**Distributed Computing**

CIT 342

**Systems Analysis and Design**

ACC 203, 204

**Financial Accounting, Managerial Accounting**

MGT 150

**Managerial and Organizational Concepts**

MAR 201

**Principles of Marketing**

CIT 351

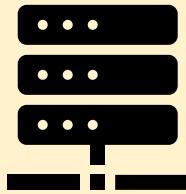
**Intro to Geographical Information Systems**

CS 385

**Artificial Intelligence I**



SPECIALIZATION: CAREERS & ACADEMICS



## IT Analysts and Consultants

In charge of implementing and upgrading computer systems for a company, and helping employees troubleshoot technology issues.

**NY average salary**  
**\$100,070**

**National average salary**  
**\$99,920**



# IT Analysts and Consultants

In charge of implementing and upgrading computer systems for a company, and helping employees troubleshoot technology issues.

**NY average salary**  
**\$100,070**

## REQUIRED SKILLS

### Computers and Electronics

Knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.

### IT Systems Analysis

Test, maintain, and monitor computer programs and systems, including coordinating the installation of computer programs and systems.

### Systems Analysis

Determining how a system should work and how changes in conditions, operations, and the environment will affect outcomes.

### Critical Thinking

Expand or modify system to serve new purposes or improve workflow. Consult with management to ensure agreement on system principles.

### Program testing software

Hewlett Packard LoadRunner; JUnit Hot technology ; Selenium Hot technology ; Usability testing software.



# IT Analysts and Consultants

In charge of implementing and upgrading computer systems for a company, and helping employees troubleshoot technology issues.

NY average salary  
**\$100,070**

## RECOMMENDED PACE SEIDNBERG COURSES

CS 121, 122

**Intro to Programming I, II**

CS 232

**Computer Organization**

CIT 221

**Global Networking Technology**

CIT 241

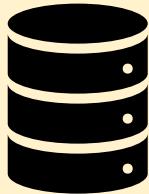
**Database Management**

CIT 344

**Project Management**



SPECIALIZATION: CAREERS & ACADEMICS



# Data Engineers

Create systems to generate and house large quantities of data. They build data pipelines that allow for data analysis and extraction.

**NY average salary**  
**\$98,050**

**National average salary**  
**\$93,750**



# Data Engineers

Create systems to generate and house large quantities of data. They build data pipelines that allow for data analysis and extraction.

NY average salary  
**\$98,050**

## REQUIRED SKILLS

### Analyzing Data

Assess database performance by testing programs or databases, and correcting errors.

### Complex Problem Solving

Write and code logical and physical database descriptions and specify identifiers of database to management system or direct others.

### Attention to Detail

Plan, coordinate and implement security measures to safeguard information in computer files against accidental or unauthorized modification, or damage.

### Judgment and Decision Making

Modify software programs to improve performance.

### Database Management and Query Software

Apache Hadoop, MongoDB, Oracle PL/SQL, AWS, Microsoft Access



## SPECIALIZATION: CAREERS & ACADEMICS

# Data Engineers

Create systems to generate and house large quantities of data. They build data pipelines that allow for data analysis and extraction.

**NY average salary  
\$98,050**

PACE

3:05 PM

### RECOMMENDED PACE SEIDNERG COURSES

**CIT 346**  
**Database Programming**

**CIT 348**  
**Data Mining**

**MAT 117**  
**Statistics**

**CIT 241**  
**Database Management**

**CIT 342**  
**Systems Analysis And Design**



SPECIALIZATION: CAREERS & ACADEMICS



# Information Security Analysts

Implement and ensure security for a company's computer network and data. They assess vulnerabilities and prevent and respond to viruses and malware.

**NY average salary**  
**\$114,910**

**National average salary**  
**\$99,730**



# Information Security Analysts

Implement and ensure security for a company's computer network and data. They assess vulnerabilities and prevent and respond to viruses and malware.

NY average salary  
**\$114,910**

## REQUIRED SKILLS

### Analyzing Data

Perform risk assessments and execute tests of data processing system to ensure functioning of data processing activities and security measures.

### Determining Standards Compliance

Using relevant information and to determine compliance with laws, regulations, or standards.

### Critical Thinking

Develop plans to safeguard computer files against accidental or unauthorized modification, destruction, or disclosure.

### Complex Problem Solving

Encrypt data transmissions and erect firewalls to conceal confidential information.

### Network Monitoring and Transaction Security Software

IBM QRadar SIEM; Nagios Hot technology ; Symantec Blue Coat Data Loss Prevention; Wireshark



# Information Security Analysts

Implement and ensure security for a company's computer network and data. They assess vulnerabilities and prevent and respond to viruses and malware.

NY average salary  
**\$114,910**

## RECOMMENDED PACE SEIDENBERG COURSES

CIT 221

**Global Networking Technology**

CIT 352

**Network and Internet Security**

CIT 354

**Computer Forensics**

CIT 312

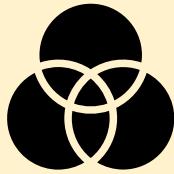
**Programming I**

CIT 356

**Operating Systems Concepts**



SPECIALIZATION: CAREERS & ACADEMICS



## Data Scientists

Use quantitative or qualitative information to understand given outcomes. They utilize data visualization software to interpret data and spot trends in a wide variety of industries.

**NY average salary**  
**\$139,814**

**National average salary**  
**\$121,625**



# Data Scientists

Use quantitative or qualitative information to understand given outcomes. They utilize data visualization software to interpret data and spot trends in a wide variety of industries.

**NY average salary**  
**\$139,814**

## REQUIRED SKILLS

### **Data visualization**

The presentation of data in a pictorial or graphical format so it can be easily analyzed.

### **Machine learning**

A branch of artificial intelligence based on mathematical algorithms and automation

### **Deep learning**

An area of machine learning research that uses data to model complex abstractions

### **Pattern recognition**

Technology that recognizes patterns in data (often used interchangeably with machine learning).

### **Data preparation**

The process of converting raw data into another format so it can be more easily consumed.

### **Text analytics**

The process of examining unstructured data to glean key business insights.



# Data Scientists

Use quantitative or qualitative information to understand given outcomes. They utilize data visualization software to interpret data and spot trends in a wide variety of industries.

NY average salary  
**\$139,814**

## RECOMMENDED PACE SEIDENBERG COURSES

CIT 241

**Database Management Systems**

CIT 322

**Distributed Computing**

CIT 342

**Systems Analysis and Design**

ACC 203, 204

**Financial Accounting, Managerial Accounting**

MGT 150

**Managerial and Organizational Concepts**

MAR 201

**Principles of Marketing**

CIT 351

**Intro to Geographical Information Systems**

CS 385

**Artificial Intelligence I**



## ACADEMICS: CLUBS



**Artificial  
Intelligence**



**Cybersecurity**



**Pace Computing  
Society**



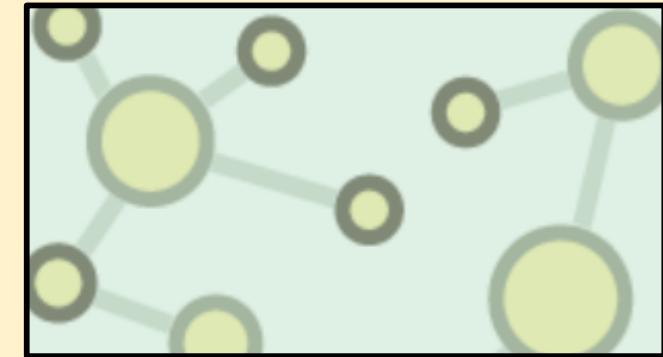
**Peer Mentor  
Program**



**Women in  
Tech Program**



## ACADEMICS : APPLIED DATA AND NETWORKING SCIENCES LABS



### Cybersecurity

Practice cracking codes and hacking into servers.

### Networking

Access exclusive CISCO training in our certified CISCO Net Academy lab.

### Big Data

Get hands-on experience with large databases and big data software with our free training for students.

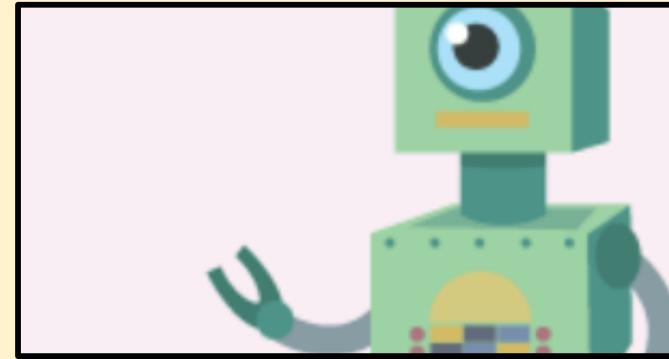


## ACADEMICS: LABS



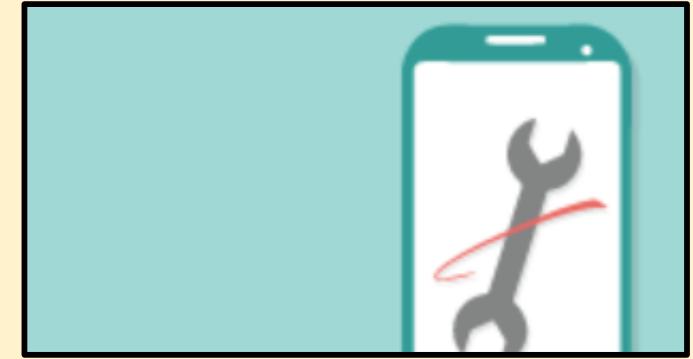
## Computer Forensics

Computer forensics comes into practically every criminal investigation that takes place today and involves the retrieval and examination of digital evidence.



## Intelligent Agents

Robotics Lab research project focuses on building and testing the ADAPT robot cognitive architecture based on the Soar cognitive architecture.



## PACE Mobile Lab

This lab is dedicated to all things mobile. There is a lot to learn and create in this exciting industry.



## ACADEMICS: INTERNATIONAL COLLABORATIONS



# Design Factory Global Network (DFGN)

A consortium of Universities around the world that celebrate Design Thinking through a highly effective model of project-based learning.

Students from Pace University travel to Aalto University in Helsinki to work with students from these diverse global universities on the Product Development Project.



## CAREER SERVICES: OUR RESOURCES

# Career Services Resources

We offer resources to prepare you for your professional career and access to opportunities that help you secure an internship and job.

**PREPARE**

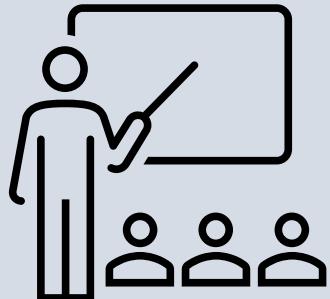


**ACCESS**



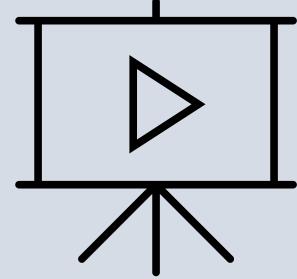


## CAREER SERVICES: WORKSHOPS



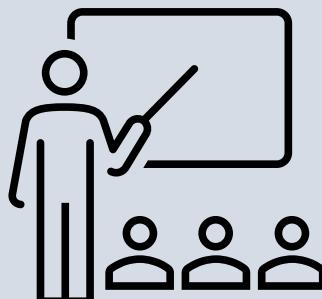
**Rock your  
Resume**

Live Workshop



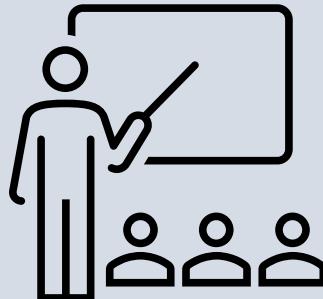
**Job Search  
Strategies**

Online  
Workshop



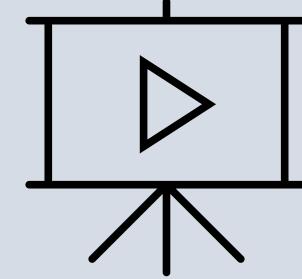
**LinkedIn  
Lab**

Live Workshop



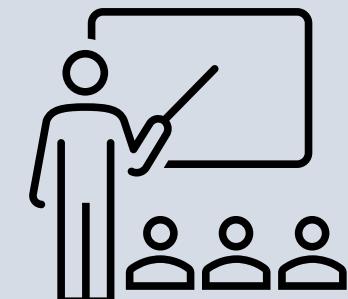
**Cover  
Letter**

Live Workshop



**Ace Your  
Interview**

Online  
Workshop



**Interview  
Lab**

Live Workshop

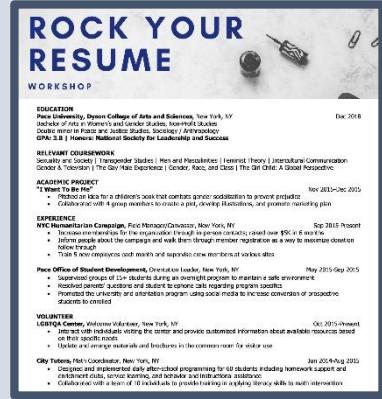
# Flexible Fridays Workshop

## Schedule

EVERY FRIDAY, 1:00-2:30PM



WEEK 1



**Rock Your  
Resume  
Workshop**

WEEK 2



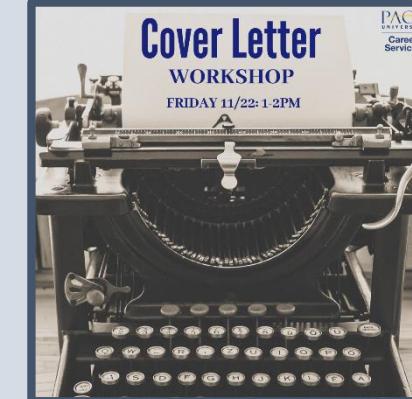
**Job Search  
Strategies  
Workshop**

WEEK 3



**LinkedIn  
Lab  
Workshop**

WEEK 4



**Cover  
Letter  
Workshop**

WEEK 5



**Interview  
Lab  
Workshop**



## CAREER SERVICES: ACCESS

pace.joinhandshake.com

For You Jobs Events Students Career Center Stephanie

Jobs & Events For You

Recommended For You

- Marketing Assistant - Recent and Future Grads Welcome! FYPM Group, Inc.  
Full-Time Job Long Island City, NY Apply before 9/28
- Consumer Insights Associate Group M  
Full-Time Job New York City, NY Apply before 12/31

No Favorite Collections No Favorite Jobs No Favorite Jobs Expiring This Week

Jobs Near Pace

Part-Time Jobs for Busy Students

Popular in Your Major

Searching for Jobs is Better Together!

Yes, count me in!

# Career Exposure

A career services management platform for...

- ❖ Job posts
- ❖ Internship opportunities
- ❖ Workshops
- ❖ Employer spotlights: professional networking
- ❖ Career fairs
- ❖ On-Campus Recruitment



SEIDENBERG OUTCOMES: INTERNSHIP EMPLOYERS  
CLASS OF 2019

**CR** Consumer  
Reports™

*WebMD*®

T-Mobile®

NEW  
YORK  
LIFE

**Siriusxm**™  
SATELLITE RADIO

**amazon**

**IBM**

**Quicken Loans**

 THE  
MADISON SQUARE GARDEN  
COMPANY





SEIDENBERG OUTCOMES: TOP SEIDENBERG POSTGRAD EMPLOYERS  
CLASS OF 2019



Cognizant®



Deloitte.



Deutsche Bank



LinkedIn

Santander



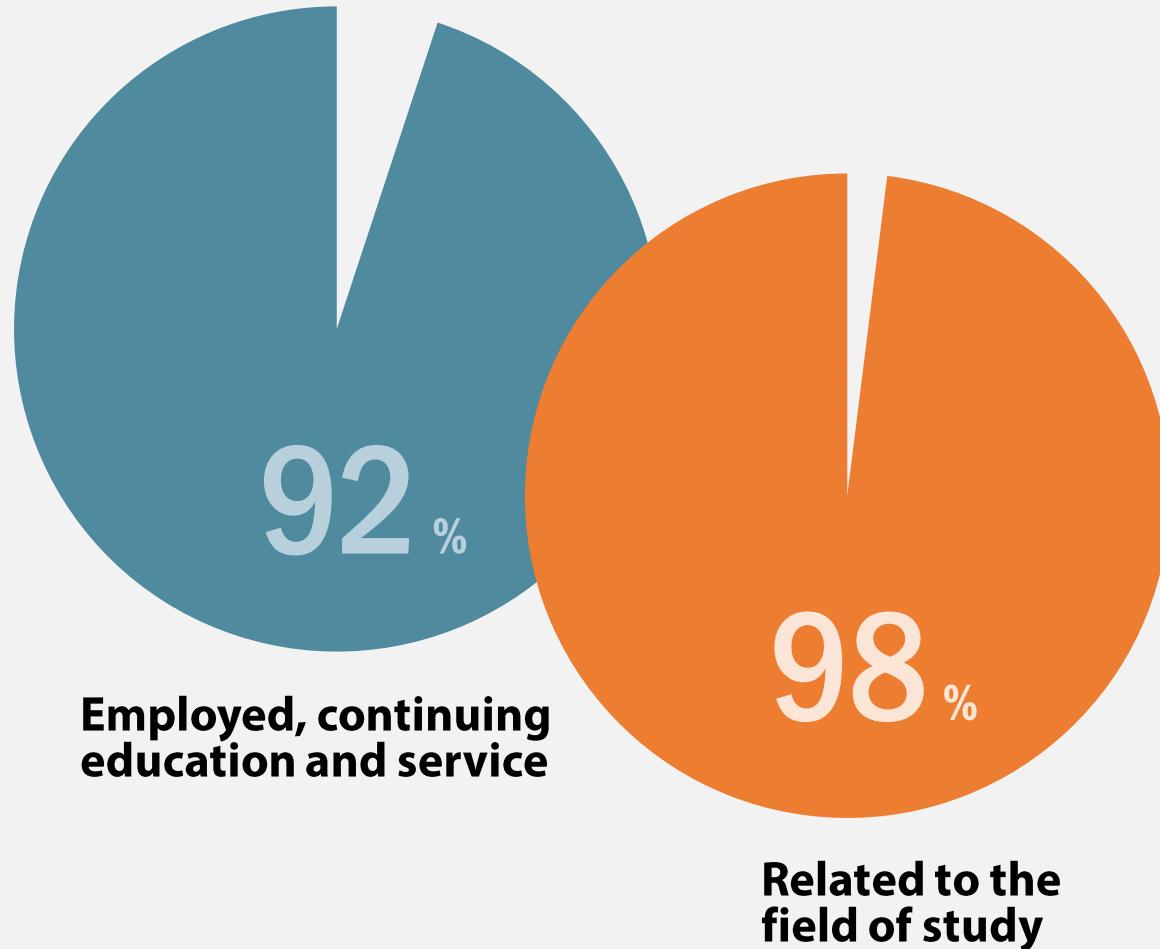
Bloomberg



## SEIDENBERG OUTCOMES: 2019 BACHELOR & MASTER GRADUATES

Employment  
data within 6  
months of  
graduation

Class of 2019: Graduates from  
July 1, 2018 to June 30th 2019  
(Data collected until  
December 2019)





## SEIDENBERG OUTCOMES: SUCCESS STORIES



A photograph of Prasad, a young man with dark hair, smiling at the camera. He is sitting at a desk in an office environment. In the background, there are two computer monitors. The monitor on the right displays the logo of the New York City Department of Sanitation, which features a green caduceus symbol with wings and the text "NEW YORK CITY DEPARTMENT OF SANITATION".

**Prasad**  
MS in Information Systems 2019  
Quality Assurance Intern at NYC  
Department of Sanitation

“

Your motivation and support has greatly contributed to my success! Thank you, Pace University Career Services, for your constant guidance.

”



## SEIDENBERG OUTCOMES: SUCCESS STORIES



**Liza**

**MS in Information Systems 2021**  
**2020 Technology Summer Intern,**  
**New York Life Insurance Company**

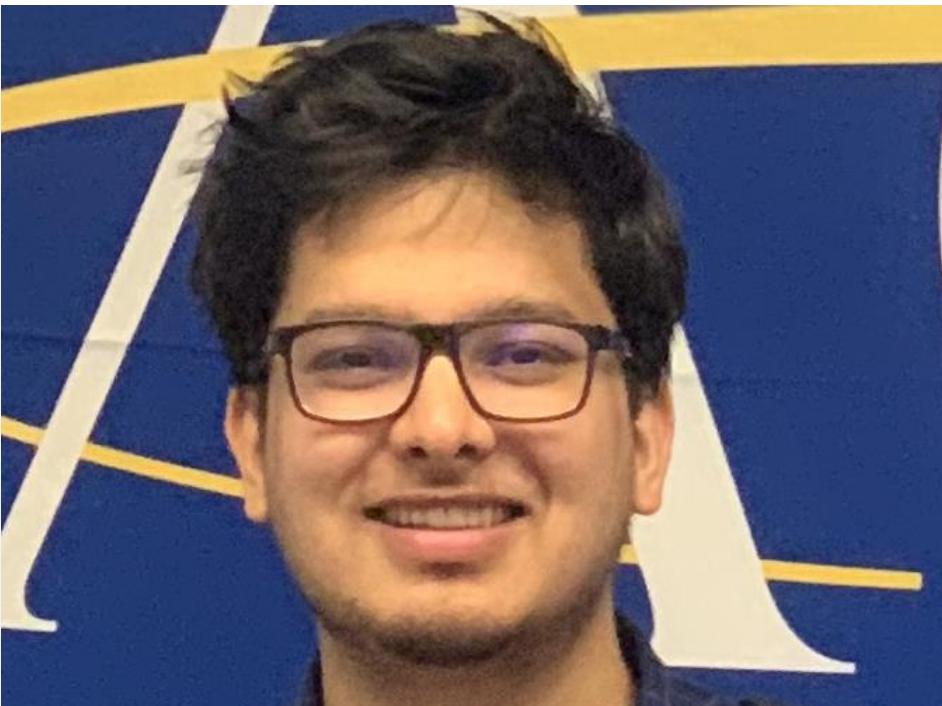
“

I remember how elated I was to receive an offer for a summer internship [after the on-campus interview organized by Pace Career Services]... I was beyond relieved to learn my internship would officially carry on in a remote format.

”



## SEIDENBERG OUTCOMES: SUCCESS STORIES



**Nikhil**

**MS in Computer Science, 2020**  
**Software Engineer, Amazon**

**amazon**

“ Thanks again to the whole Career Services team for everything you all do :) ”



## SEIDENBERG OUTCOMES: SUCCESS STORIES



# Christopher

**BS in Information Systems, 2020**

**Technology Vendor Manager, Bank of America**

“

During my journey at Pace University I have grown from student to teacher, from a team member to leader and from inexperienced to expert. I owe all of this, thanks to the guidance, support, and a dash of tough love from my career service advisers...

”

**Bank of America.**



# CAREER SERVICES

## CONTACT

[www.pace.edu/careers](http://www.pace.edu/careers)

[careers@pace.edu](mailto:ccareers@pace.edu)

NYC 212-346-1950

PLV 914-773-3415

## VISIT



### NEW YORK CITY

41 Park Row  
14<sup>th</sup> Floor

**Office Hours:** M-F: 3-4, T-Th: 4-5



### PLEASANTVILLE

Paton House  
861 Bedford Road  
**Office Hours:** M-F: 12:30-2

## CONNECT



paceUcareers



paceCS



paceUcareers,  
DrJShmidt



Pace Career Services,  
Seidenberg Group

# ACADEMIC ADVISEMENT

- Schedule a call or meet with an academic advisor
- Attend a setter for a day class
- Join us on Wednesdays for PACE Computing Society speaker events
- Take a tour of our Cybersecurity and Digital Forensics labs

## CONNECT

