THE CITY UNIVERSITY OF NEW YORK
College of Staten Island
Department of Computer Science

Welcome to Virtual InfoNight!

Computer Science
Information Systems & Informatics

Hosted by the Office of Recruitment and Admissions
Department of Computer Science
School of Business

College of Staten Island / CUNY

Degree Programs

- AAS in Computer Technology
- BS in Computer Science
- BS in Computer Science-Mathematics
- BS in Information Systems & Informatics
- 4+1 BS/MS Degree in Computer Science

AAS in Computer Technology: 60 Credits

General Education Requirements: 28–30 Credits

ENG 111; ENG 151; MTH 231; AST 120 or BIO 170 or CHM 141 or PHY 120; GEO 115 or PHY 160; COR 100; AST 160 or BIO 180 or CHM 142, or ESC 110, or GEO 102 or PHY 160; (Year of English: ENG 111, ENG 151, Intro to CS: CS 126, Year of History, Year and a Half of General Science: BIO, or CHM or PHY, or AST, or GEO with Labs)

TWO COURSES FROM THE FOLLOWING FLEXIBLE CORE:

World Cultures and Global Issues Course; Individual and Society Course (FISR); Creative Expression Course (FCER))

Core Requirements: 28–30 Credits

CSC 126: Introduction to Computer Science (FSWR)(STEM)

(C or Higher)

In addition to the above students must complete the requirements from either the **Programming** or **Information Science** sequence

AAS in Computer Technology: 60 Credits

Lucrative careers available with an Associate's, starting salaries around $50k, $80k and up with 5yrs. experience)—*Monster.com, 2020*

- Field Computer Technician $24/hr: *(2020, Indeed.com)*
- Information Technology Support Specialist
- Support Technician/Computer Technician
- Software Engineer
- Data Scientist
- Network Specialist

BS in Computer Science: 124 Credits

- One of the **most popular programs** at CSI, with over 800 students in the program
- The Computer Science program offers a **full four-year curriculum in computer science that** prepares students for careers as computer professionals and/or for graduate study.
- The major provides a broad-based background in computer science and includes courses in computer software, systems, mathematics, and computer engineering.
- A student, under the guidance of a computer science advisor, may also select additional courses to pursue particular interests.
- Students interested in transferring into the program from the two-year Computer Technology program should consult the department chairperson.

Program Advantages

- ABET-accredited since 1989
- Seamless en-route from AAS to BS to graduate programs
- Research & internship opportunities
- Active student organizations
- Small class sizes (most are 25–35 students)
- Proximity to CSI Tech Incubator

ABET-Accredited

- Prestigious sought–after designation
- CSI's program upholds high standards
- Globally recognized by industry and graduate programs
- Curriculum is not stagnant—evolves to meet progressing needs of industry
- Students are best-prepared for next steps in their professional careers or graduate study

- Ensures graduates meet educational requirements necessary to enter and excel in the profession
- Industry input in the educational process to reflect current and future professional skillsets
- Awareness of and responsiveness to global industry needs; enhances your professional mobility, such as in multinational corporations and governmental capacities

BS in Computer Science: 124 Credits

General Education Requirements*: 42–45 Credits

Year of English: ENG 111, ENG 151
Intro to CS: CS 126
Year of History: COR 100
Year and a Half of General Science: BIO, CHM, PHY, AST, or GEO with Labs

Major Requirements: 86–92 Credits

Year and a Half of Math, including Calculus I and II

A grade of C or above is required in all CSC courses that are prerequisites for courses in the major requirements. Students will be allowed to repeat courses, if necessary.

It is recommended that students consult with a departmental academic advisor to choose your courses for each semester.

***19–20 credits required for the Major also satisfy general education requirements.**

BS in Computer Science/Mathematics: 120 Credits

Interdisciplinary Program

Co-Director: Professor Carlo Lancellotti, Building 1S, Room 215
Co-Director: Professor Shuqun Zhang, Building 1N, Room 215

The Computer Science-Mathematics program offers a baccalaureate degree and a minor. Offered by the Departments of Computer Science and Mathematics, the joint program provides a balance between these two disciplines with an emphasis on their applied aspects and their relationship to each other.

Math Requirement: Level 3 and 4 Mathematics to earn the degree

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4+1 BS/MS in Computer Science

General Education Requirements: 42–45 credits

- **Major Requirements: 86–92* credits**
- **Total Credits Required: 124**

*19–20 credits required for the Major also satisfy general education requirements

4 + 1 BS/MS Accelerated Program in Computer Science

Computer Science Graduate Course Double-Counting Policy

Computer Science majors may be granted permission to take up to **three additional graduate courses at undergraduate tuition** to be counted towards their Bachelor's degree.

These courses may be used only to **substitute for 400-level** Computer Science elective courses (CSC designation). These graduate courses will be **double-counted toward their Master's degree (10 graduate courses, 30 credits)**. This allows students to earn both the Bachelor's and the Master's degrees in five years.

4+1 BS/MS in Computer Science

Program Educational Criteria:

- **Current enrollment in Bachelor's degree in Computer Science or Computer Science/Mathematics** at CSI and **successful completion of three years of study with 90 or more** earned credits.
- **Cumulative GPA of 3.30** or above.
- **Two letters of recommendation**, at least one from a full time CSI Computer Science faculty, under whom the applicant has studied.
- **Permission from the course instructor**, the coordinator of the Graduate program, and the department chairperson.
- **Application for admission and conditional acceptance** to the Computer Science graduate program.
- **All graduate elective courses can be taken as double-counting courses, except the required core courses**: CSC 716, CSC 727, CSC 740 and CSC 770

Interested in computing?

Bachelor of Science (BS)

Computer Science

Earn your bachelor's degree at CSI! (124 credits)

Specializations from which you can choose

Game Development - iPhone, Android, Unity3D

Choose 3:	Introduction to Game Programming CSC 227	Advanced Game Development CSC 427	Artificial Intelligence CSC 480	Computer Graphics CSC 470

Networking & Security

Choose 3:	Computer Hacking Revealed CSC 223	Internet Data Communications CSC 421	Advanced Data Communications CSC 435	Applied Cryptography CSC 426

High Performance Computing (HPC)

Choose 3:	Introduction to HPC CSC 229	Advanced HPC CSC 429	Shared Memory Parallel Computing CSC 425	Linear Algebra MTH 338

Our BS in Computer Science is ABET accredited since 1989.

College of Staten Island
Department of Computer Science

join our talented faculty & students

be at the forefront of technology

improve your career & shape the future

www.csi.cuny.edu

Specializations

BS in Information Systems and Informatics:

Co-Coordinators: Louis Petingi, Ph.D., Yumei Huo, Ph.D., Soon Ae Chun, Ph.D, and Paolo Cappellari, Ph.D.

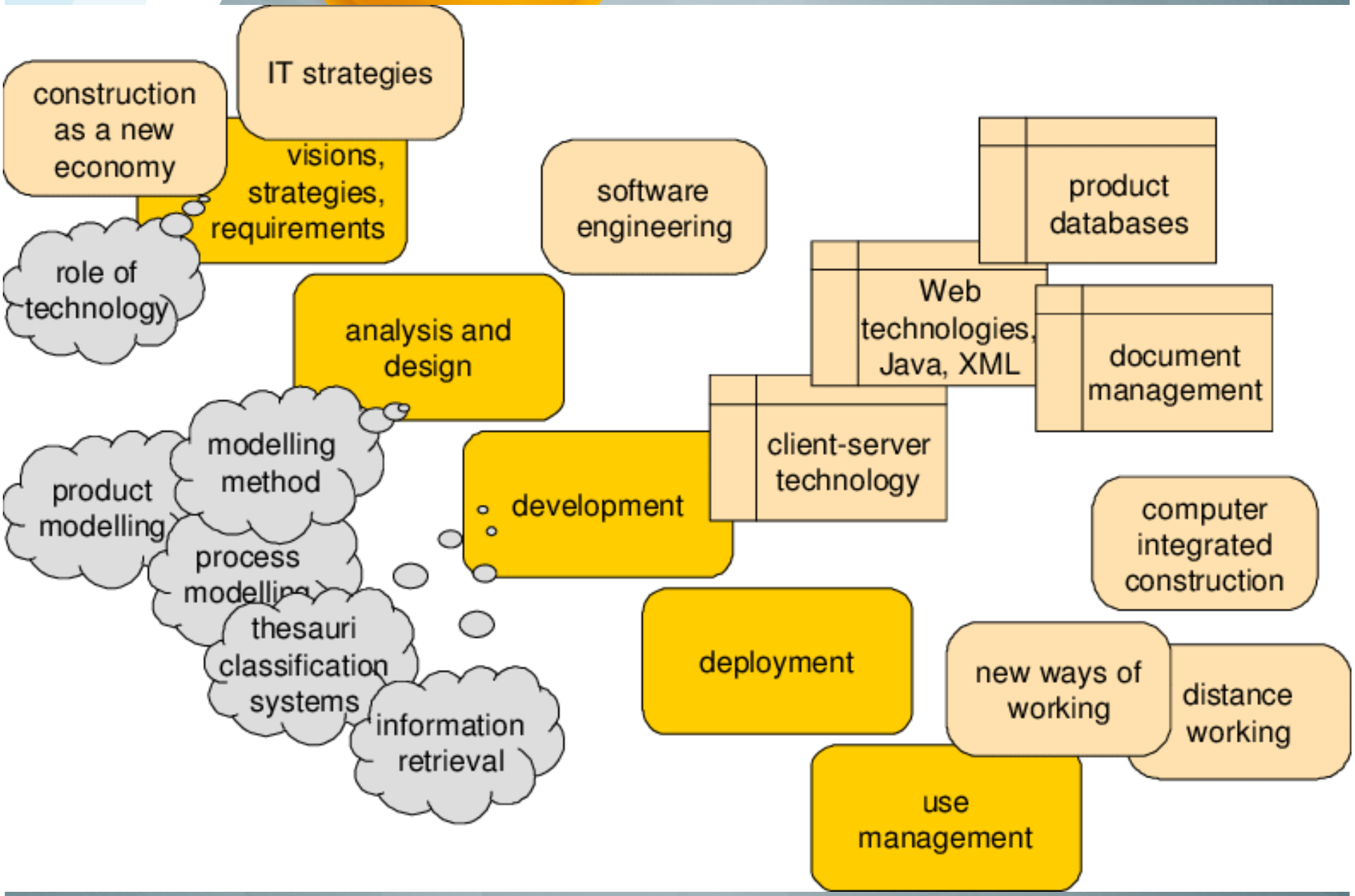
What is Information Systems and Informatics?

Offered as an interdisciplinary collaboration between the Departments of Marketing and Computer Science, provides students with core business and technical competencies to traverse the boundary between **management** and **computer information technology**.

Informatics is (computing) a branch of **information** science and of computer science, that focuses on the study of **information** processing and particularly as respect to **systems** integration and human interactions with machine and data

Information systems (IS) are computing systems that support business operations, management, and decision making in organizations.

BS in Information Systems and Informatics



BS in Information Systems and Informatics:

What is Information Systems and Informatics

- The exchange, storage, access/retrieval of information using information transmission devices and their programming systems.
- IT specialists understand the latest information and communication technology issues, develop software and solve practical engineering problems. Informatics and information science integrate disciplines such as computer science, communication studies, complex systems, information theory, information technology.
- **Career opportunities** for graduates cover a wide range of options: **archivists, systems developers, programmers, system designers, web designers, web developers, information architects, business analysts, database administrators, product managers, web content managers and health information managers.**

BS in Information Systems and Informatics: 120 Credits

A **minimum GPA of 2.50** is required for admission to and continuation in the Information Systems major and for graduation (Chazanoff School of Business requirement). There is no minimum GPA requirement for students enrolling in individual courses.

General Education Requirements: 42 credits
Major Requirements: 68–71 credits
Electives: 7–10 credits
Total Credits Required: 120

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BS in Information Systems and Informatics:

Major Requirements (13 classes, 68-71 credits)

ACC 114	Introduction to Accounting I (RNL)	4	
BUS 160	Business Law I (RNL)		3
BUS 215	Information Management (RNL)		4
CSC 126	Introduction to Computer Science (FSWR)(STEM)	4	
CSC 226	Web Database Applications (RNL)	3	
CSC 315	Introduction to Database Systems (RLA)		4
ECO 111	Introduction To Microeconomics (RLA)	4	
ECO 230/ MGT 230	Intro to Economic and Managerial Stats (RLA)	4	
ISI 205	Data Communications and IT Infrastructure (RNL)		4
ISI 300	Information Structures for Business (RLA)		4
ISI 352	Introduction to Systems Analysis (RNL)	4	
ISI 490	Project in Info. Systems and Informatics (RLA)	4	
MGT 110	Organizational Theory and Management (RNL)	3	

BS in Information Systems and Informatics:

Major Requirements (Math)

In addition to the course taken to satisfy the general education requirement (RMQR), students must take an additional math course chosen from the following:

MTH 221: Applied Finite Mathematics and Business Calculus (RMQR)(STEM)		4	
OR			
MTH 229 Calculus Computer Laboratory (RLA)		**1**	
MTH 230 Calculus I with Pre-Calculus (RMQR)(STEM)			**6**
OR			
MTH 229 Calculus Computer Laboratory (RLA)		**1**	
MTH 231 Analytic Geometry and Calculus I (RMQR)(STEM)		**3**	
OR			
MTH 232 Calculus II (RMQR)(STEM)			**3**

*Students should take the highest-level mathematics course for which they qualify. Students may be required to take **MTH 123** to fulfill the pre- or corequisites for **CSC 126, MTH 221**, or **MTH 230**; and/or **MTH 130** for **MTH 231**.*

BS in Information Systems and Informatics:

Major Requirements (Concentrations)

In addition to the major requirements student must choose and complete the requirements in one of the following concentrations:

Concentration One

ISI 315	Information Security and Risk Management		4
ISI 334	Business Intelligence and Analytics (RNL)		4
ISI 364	Enterprise Computing Strategies (RNL)	4	
ISI 374	Information Systems Project Management (RNL)	4	

Concentration Two

CSC 421	Internet Data Communications (RNL)	4	
CSC 424	Adv. Database Management Systems (RNL)	4	
CSC 438	Mobile Application Development (RNL)	4	
	AND		
	One course chosen from Concentration One		4
Total Credit Hours:		**68–71**	

Research Internships Career Mentoring

- Faculty offer side-by-side research opportunities to students, some of which are paid in summer.
- We post any internship and career opportunities in Tech via our networks, and on our Facebook page.
- Students exhibit their research at the Undergraduate Conference on Research, Scholarship, and Performance
- Career mentoring through **CUNYTech Prep, WiTNY, Revature**

Careers & Median Salaries

Where Our Graduates Work

"I learned that computer science is not just about syntax and coding. We can make a difference in peoples' lives by developing applications." -Kyle Rector

Computer Science

Careers & Salaries

Database Administrator	$85k
Software Developer	$102k
Network Architect	$101k
Web Developer	$66k
Computer Programmer	$80k
Info. Security Analyst	$93k
Research Scientist	$112k
IT Systems Manager	$135k

Where our graduates work

- Google
- Lockheed Martin
- JPMorgan Chase
- Accenture
- CUNY
- Penn State University
- WeWork
- Prudential Financial
- Shaw Group
- Bloomberg
- VantagePointLabs
- Avenue Capital Group

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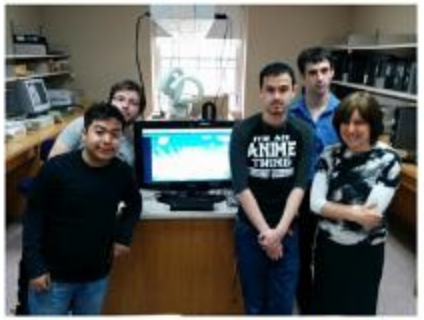
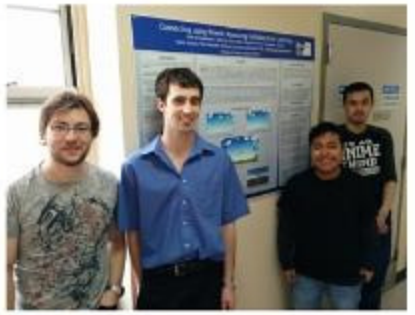
Median annual salaries provided by US Dept. of Labor: www.bls.gov

Faculty & students collaborating on research

Congratulations!

CSI Game Development Club presents at CUNY Games Conference





Connecting using Kinect:
Assessing Collaborative Engagement
Student lead: Gabriel Goldstein; Faculty mentors:
Dr. Deborah Sturm with Dr. Kristen Gillespie

This is an interdisciplinary project to build a two player collaborative Kinect game designed to support student engagement. We are studying whether students, including those on the autism spectrum, communicate and collaborate more effectively when engaging in a collaborative activity with one another through an intermediate medium (as cartoon avatars in a digital work space) relative to an in-person version of the same task. The game is written using Unity3d with C#.

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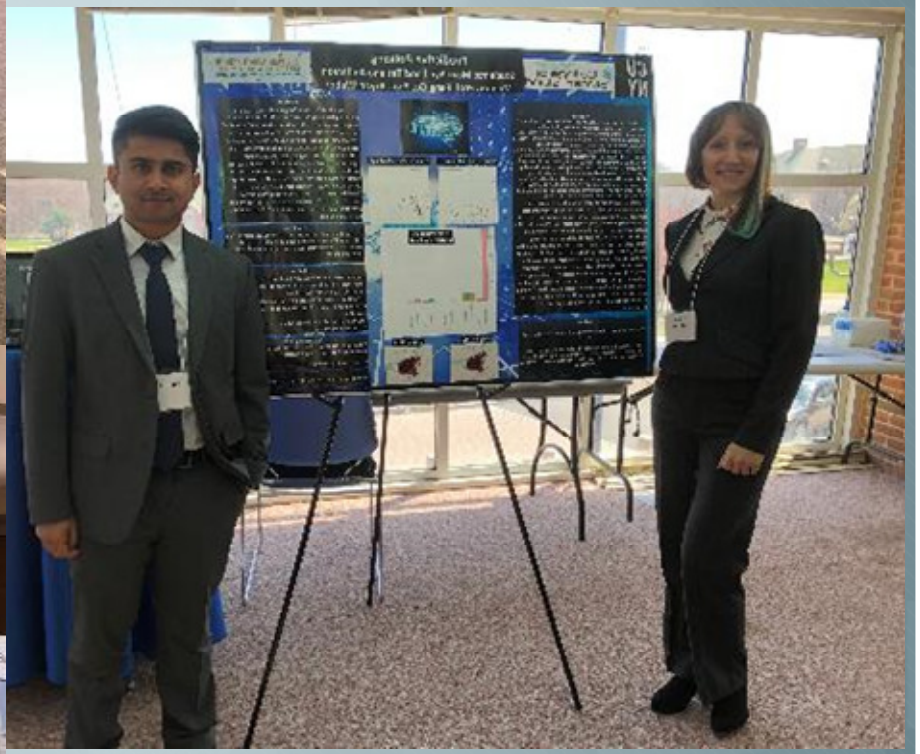
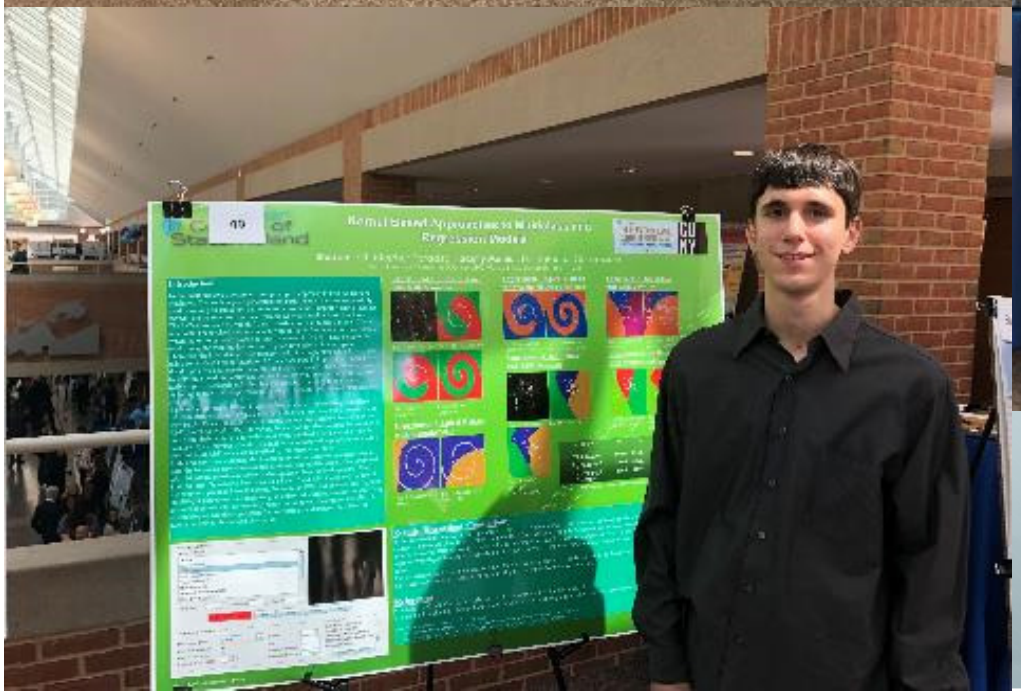
Undergraduate Research Conference





Research Experiences for Undergraduates (REU)

THE CITY UNIVERSITY OF NEW YORK
College of Staten Island

REU: COMPUTATIONAL METHODS IN HIGH PERFORMANCE COMPUTING WITH APPLICATIONS IN COMPUTER SCIENCE

Work with faculty mentors.

APPLICATION AREAS:

WIRELESS NETWORKS, IMAGE PROCESSING,
GRAPH THEORY, RELIABILITY THEORY, CRYPTOGRAPHY,
MODELING AND SIMULATION OF COMPLEX SYSTEMS

EXPLORE NEW YORK CITY!

June 5th through August 11th

**$5,000 stipend,
plus travel expenses
and lodging provided**

Apply online: **www.cs.csi.cuny.edu/REU**

DEADLINE: MARCH 1

*Prerequisites include a background in C, C++ or java, discrete mathematics, data structures and analysis of algorithms. Minimum GPA: 3.0.
Must be a US citizen or permant resident to apply.
Women and minorities are encouraged to apply.

CUNYTech Prep experiences

My experience in CUNYTech Prep, and why you should apply!

Student Engagement

Muhand Jumah :: Senior, Computer Science Major
CUNYTech Prep 2016-17 cohort member

What's your experience like?

I had especially strong connections with our instructor, the assisting instructor, and coordinator. You will develop great relationships. They will coach you on how the work setting environments are. Plus, collaboration is encouraged in this experience which I did not expect, but really value. Coming in, I knew about development, but from my experience in this program, I've had greater exposure to programming languages which we utilized on projects.

Why should students apply?

From my experience, this program directly improves my professional development. It has already helped me build my professional connections and my network. I attend events with companies I may want to work for. They've helped me with my portolfio on Github, LinkedIn, and my resume as well. The program certainly met my expectations, and in many ways exceeded it. We see how software engineers work, get exposure to various programming languages, learn how full-stack development works, get assistance with our portfolio, encouragement to attend networking events, and training for technical interviews, including white boarding.

Time management tips

The workload is akin to having a course on your schedule. Plan your time accordingly. You will have assignments for CUNYtech prep, and your existing courses. When using Slack, favorite some channels, such as those pertaining to your homework, projects, or managers, so that the communication stays manageable. It helps me to start my assignments the day I receive them. I would work on the subway or ferry, whether for CUNYtech prep, or for my classes, to best utilize my available time. I would also manage well by asking for help, whenever I need it.

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For more info and to apply to CUNYTech Prep:
http://cunytechprep.nyc/

CUNY Hackathon winners

CSI students applying their education to solve industry challenges!

WiTNY

Women in Technology New York

WiTNY

Women in Technology New York

An effort to broaden the participation of women in technology, offered by four CUNY campuses: CSI is one

Summer Guild, Winternships, Career Readiness Program

- Supporting companies include Verizon, Accenture, Citi Foundation, IBM, JPMorgan Chase, Xerox, AppNexus, and Grand Central Tech.
- Learn product & software design, entrepreneurial skills
- Career Access Program, $3k scholarships available

WiTNY Career Readiness Program and Winternships

The **WiTNY Career Readiness Program is a 6-week comprehensive extracurricular progra**m, designed to give students industry-specific preparation for the tech hiring process. Centered within a cohort-focused, experiential framework, sessions cover everything from building an effective resume to how to prepare for a technical interview.

- Landing one or more **summer internships** nearly doubles the likelihood of landing a job within six months of graduating from college. Employers look for internship candidates that have some tech experience on their resumes.

- The **Winternship, a paid, three-week, mini-internship experience during the January academic recess**, is an innovative program that creates a new pathway into those coveted summer internships. In just three weeks, 'Winterns' get immersed in their host company's business and work on a challenge project.

WiTNY Summer Guild

- Each summer, WiTNY hosts a transformational learning opportunity for **women starting their first or second year at CUNY**. In just one week, students develop their own app and have a chance to experiment with coding, digital product design, user experience research, and other areas of tech.
- No previous experience with computer science is required
- Students are paid a stipend after completing the program.
- Students present their prototypes to a group of peers and professionals, and learn the next steps toward pursuing a career in computer science.
- **Who should apply?**
  You should apply! Are you a CUNY student? Are you undecided about what job you'll get when you graduate? Are you curious about coding? Do you like art and math? Do you want to learn about job opportunities in software development and user interface design? Are you just looking to meet friends who like computing?

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CSI Tech Incubator

Community of tech entrepreneurs and innovators

Mentoring available to develop your business ideas, from concept to pitch

Networking events with venture capitalists, angel investors, industry specialists

CUNY 2x Program

- College of Staten Island will get $2 million over the coming years to grow their tech programs as part of a city effort to increase the number of CUNY graduates working in the tech industry
- NYC Department of Small Business Services plans to chip in $4 million to the CUNY 2X Tech program to recruit more industry employees to teach CUNY classes and offer internships
- $24M program expands the pipelines of opportunities for New Yorkers to enter quality, well-paying careers in the tech sector. Local employers can now reach into a larger pool of home-grown talent to help their business and New York City's economy grow.
- Computer science students at participating schools get additional course offerings, more advisers and planned internship placements with partner companies

Links & Contact

- ABET: http://www.abet.org/accreditation/why-abet-accreditation-matters/a-valued-credential/#industry
- Computer Science major description: http://csicuny.smartcatalogiq.com/en/current/Undergraduate-Catalog/Divisions-Schools-Departments-and-Programs/Division-of-Science-and-Technology/Department-of-Computer-Science/Computer-Science-and-Computer-Technology/Computer-Science-BS
- Information Systems & Informatics major description: http://csicuny.smartcatalogiq.com/en/current/Undergraduate-Catalog/Divisions-Schools-Departments-and-Programs/Interdisciplinary-Studies/Information-Systems-and-Informatics/Information-Systems-and-Informatics-BS
- CSI Tech Incubator: https://www.csitechincubator.com/
- WiTNY: http://www1.cuny.edu/sites/women-in-technology/about/
- CUNYtech Prep: https://cunytechprep.nyc/

Questions & Discussion!