



Stony Brook University

Computer Science @ Stony Brook

Admitted Students Day 2019

What is Computer Science?

- The study of computers?
- Not exactly...
- The study of problems and problem-solving *with* computers



What is Computer Science?

- Computing professionals develop **algorithms** – the step-by-step procedures which solve the challenging technical problems we find in all areas of human endeavor



What Qualities Do I Need to be Successful in Computer Science?

- Curiosity & creativity
- Perseverance & self-motivation
- Excellent time management
- A compulsion to solve problems
- A need to be challenged
- A thirst to be learning constantly



What Qualities Do I Need to be Successful at Stony Brook?

- Self-discipline
- Personal responsibility for your academic success
- Self-awareness of your strengths and weaknesses
- Strong study skills



What Would I Study as a Computer Science Major at SBU?

- Computer Science as a discipline has three major divisions of study:
 - Software and Applications
 - Systems
 - Theory



What Would I Study as a Computer Science Major at SBU?

- Computer Science is not just about computer programming and tinkering with machines
- As a CS major you will also study:
 - Many topics in applied mathematics
 - Computer hardware design
 - Operating systems internals, computer networks

What is the Difference Between CS and Information Systems?

- Information Systems focuses on the business applications of software and computing systems
- Computer Science is a more technical, mathematical and scientific discipline with a stronger emphasis on computer programming

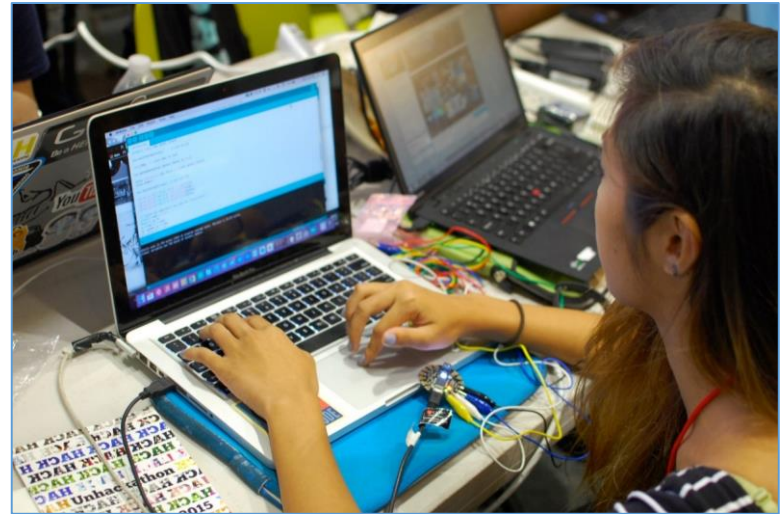


Which Students at Stony Brook Can Major in Computer Science?

- Some admitted freshmen enter SBU as declared majors in Computer Science
- Others are admitted to SBU as “Area of Interest” in CS and must qualify later for major entry
- The CS major is generally unavailable to students outside the College of Engineering and Applied Sciences

What Courses Does a Freshman CS Student at SBU Typically Take?

- Introductory programming courses
- Calculus I and II
- Natural science
- General education courses
- First year seminar



Does SBU Accept Advanced Placement Credit for CS Courses?

- *AP Computer Science A*
 - Score of 3: CSE 101
 - Score of 4 or 5: CSE 114
- *AP Computer Science Principles*
 - Score of 3, 4 or 5: CSE 101



What Specializations in Computer Science Does SBU Offer?

- Game Programming
- Human-computer Interaction
- Systems Software Development
- Computer Security
- Artificial Intelligence and Data Science
- *Completing a specialization is not required at SBU*

What Careers Can I Pursue with a B.S. Degree in Computer Science?

- Software Engineer
- Web Developer
- Systems Administrator
- Data Scientist
- Computer Network Architect
- Database Administrator

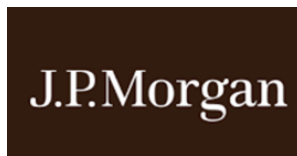


Does SBU Offer Internship and Job Fairs for CS Majors?

- Fall and spring, with 65-70 companies attending each term
- On-campus interviews possible
- Career Center offers résumé reviews, mock interviews
- CS and IS are the top SBU majors recruited by employers



Where Do SBU Computer Science Graduates Work After Graduation?



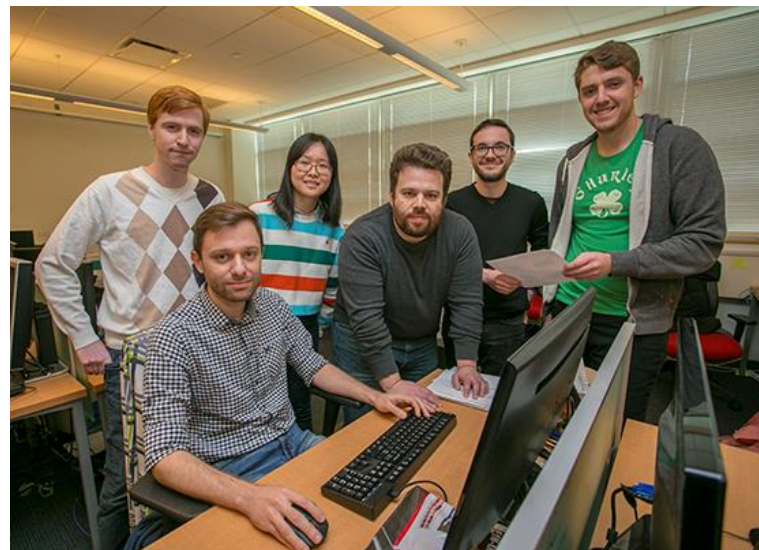
Does SBU Have a Mandatory Co-op in Computer Science?

- No, we do not have a formal co-op program
- Instead we encourage our students to secure paid summer internships and complete their degrees in four years



Can I Do Computer Science Research as an Undergraduate?

- Yes! A CS student with the right skill set, motivation and discipline can participate in projects
- Great opportunity to make long-term connections with faculty



What Extra-curricular Activities are Available for CS Majors?

- Stony Brook Computing Society
- Women in Computer Science
- Stony Brook Game Developers
- Stony Brook Robotics Team
- Hackathons
- And this is just the beginning!








What is a Hackathon?



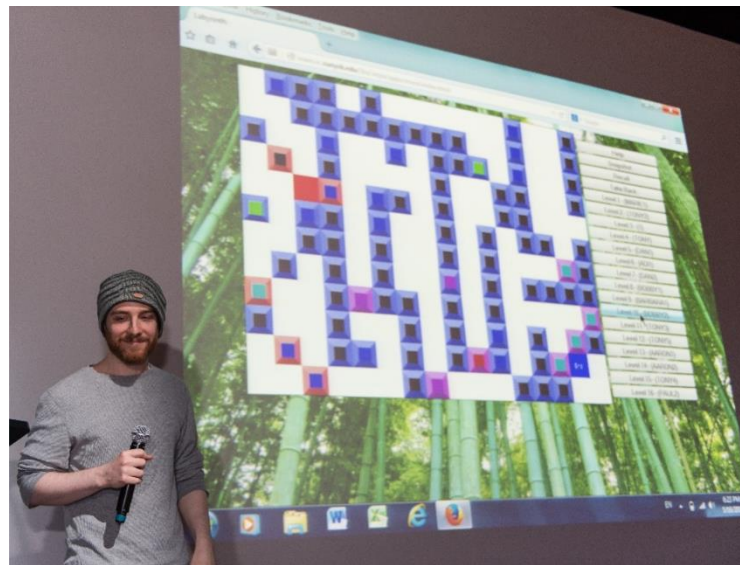
WiCS HackHealth 2019

A health-themed hackathon held just last month

MONDAY March 4th	TUESDAY March 5th	WEDNESDAY March 6th	THURSDAY March 7th	FRIDAY March 8th	SATURDAY March 9th
Introduction To Machine Learning  5:30 PM New CS 220	Google Cloud Platform Study Jam  7:00 PM Old CS 2120	WiCS GBM #3: Introduction to HCI/UX  5:30 PM Old CS 2120	Introduction to Android Studio  5:30 PM Old CS 2311	Women in Tech Talk with Anita Wasilewska  2:30 PM Old CS 2120	HackHealth  Register at hackhealth.tech . Happy hacking! 9:00 AM - 10:00 PM GLS/HDV Center

Annual Video Game Programming Contest

- SBU student competitors
- Attended by video game industry leaders, many of whom are alumni
- Prizes!



Does SBU Have an Accelerated Master's Program for CS?

- Yes! You can apply after taking three 300-level technical CSE courses; GPA must be 3.25+
- Affords in-depth study of a narrow area of CS
- Shorter length than a traditional M.S. program



Why Should I Come to Stony Brook to Study Computer Science?

- Expert faculty
- Academic rigor
- Program accredited by ABET
- Many extra-curricular activities
- Excellent computing facilities
- Very high return on investment



Questions?

