



IT Lab Summer Security Intensive (SSI)

The Heinz College
Carnegie Mellon University

IT Lab Fellowship 2023
Jun 8, 2023- Jul 29, 2023

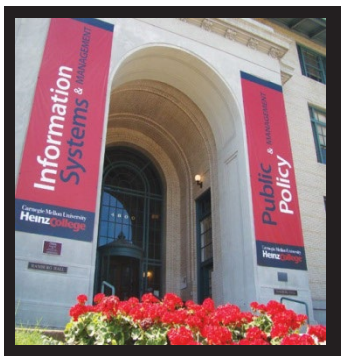


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INTRODUCTION

Welcome to the Heinz College and the School of Information Systems and Management's IT Lab Summer Security Intensive (SSI). The IT Lab at Heinz College provides undergraduate students the opportunity to develop the skills needed for admission into the nation's top cybersecurity and/or information systems programs. The program lasts seven weeks and is held on the campus of Carnegie Mellon University, in Pittsburgh PA. Students will receive intensive training in a variety of areas including technical skills, quantitative skills, communication skills and leadership skills.

BEFORE YOU ARRIVE

There are a few things we need from you before you arrive on campus. Please send the information listed below to Brittany Foster (brittanf@andrew.cmu.edu) before and no later than **May 15th**.

Short Biography

Please write a short biography. Include the short biography in a Word document and write your first and last name in the subject line of the email. This information will be shared with your fellow classmates, IT Lab faculty, TAs, and staff.

Please include your name, university, major, and area of interest. Then write a short description of your past achievements and future goals. Please limit the description to 100 words. **Please use “spell check”, correct grammar, and punctuation.** Here’s an example of what we’re looking for:

Samuel North
University of Pittsburgh
Major: Economics/Criminal Justice
Interest: Domestic Policy

example

Samuel is achieving his goal of helping others through his work with the Infolink project. He serves as a teaching assistant and mentor to minority high school student in the Pittsburgh Public Schools, and provides tutoring and college counseling. Samuel is also the president of the Opportunity Program and Undergraduate Services Student Council that offers deserving minority students academic and financial support to help them reach their college goals. In the future, Samuel hopes to continue helping others through fighting for reform in America’s criminal justice system and policies.

Email ID & Account

Prior to arriving on campus, you will receive an email from the Heinz College admissions office containing your email account and password instructions. This is called your **“Andrew ID”** at Carnegie Mellon University. Your Andrew account is your gateway to the computing environment at Carnegie Mellon.

Student ID Card

You must submit your photo for the student ID+ Card **PRIOR** to arriving on campus and as soon as you receive your Andrew ID (your Andrew ID is required to complete the on-line photo submission).

Submit your Photo through the ID Photo Submission Application. You will be able to crop the photo to see exactly what the result will be. You will also receive communications throughout the entire process confirming that the Card Office has received your submitted photo as well as notifying you when your photo has been approved. Photo ID cards will be distributed once you arrive on campus.

Deadline to submit your photo: Before and no later than Monday, May 15th. Use the following link to upload your photo: <http://www.cmu.edu/idplus/idcards/idphotos.html>

TRAVEL TO CAMPUS

All students should plan to arrive on campus on June 8th. If you must arrive earlier or later than June 8th, contact Brittany Foster (brittanf@andrew.cmu.edu) as soon as possible to discuss your situation. You should note that permission to arrive late is granted only when exceptional circumstances beyond your control will prevent you from arriving on time.

To book your flight, please provide Brittany Foster with the following information:

- Departure/return airport
- Title (Mr, Mrs, Ms, or Miss)
- Name exactly as it appears on government issued identification
- Gender (required by airline)
- Date of Birth
- Cell Phone Number
- Email Address

An agent from CTP, the university's preferred travel agency, will contact you directly to finalize travel arrangements. Communication regarding travel arrangements will come from ctpuniversitiesmallgroups@travelctm.com with the subject line "CMU – Heinz College- IT Lab – Attendee Name". Please be sure to respond to these emails promptly to ensure timely processing.

Directions to Campus

Driving:

Make sure you let us know in advance if you would like to bring a car to campus – we'll have to make special arrangements so you can park your car on campus for the duration of the program.

Travel from Airport:

The Pittsburgh International Airport is 22 miles from Carnegie Mellon. We recommend that you take the Port Authority Airport Flyer.

Pittsburgh Regional Transit (PRT) 28X Airport Flyer Bus: The bus stops in front of Carnegie Mellon University. The trip takes about 45 minutes and the cost is \$3.75 per traveler. The most recent information and schedule can be found at <https://www.rideprt.org/services/airport-service/>. For additional information or questions, contact PRT at 412-442-2000.

Ride share and taxis are also an option. The address to check-in is 4800 Forbes Ave. Pittsburgh PA, 15213. Estimated cost for a taxi from the airport to CMU is about \$60.

Carnegie Mellon University campus map: <https://www.cmu.edu/visit/maps-parking-transportation.html>

ARRIVING ON CAMPUS

Room Registration

When you arrive on campus you will need to stop by Hamburg Hall, Room 1104: 4800 Forbes Ave. Pittsburgh PA, 15213 BEFORE 6pm to receive the sponsored ID card that provides access your dorm room. If you are unable to make it by 6pm, you will report to the Summer Housing Guest Services Office located on the first floor of Stever House (1030 Morewood Avenue) and work with the on-site staff to gain entry. Please be sure to let Brittany (brittanf@andrew.cmu.edu) know if you will not make it by 6pm.

Books & Supplies

When you arrive on campus, we will provide you with course books and course materials necessary for the IT Lab program. Please bring supplies with you; notebooks, stapler, pens/pencils, highlighters, and calculator. Otherwise, you may purchase these supplies at the University Bookstore: <https://bookstore.web.cmu.edu/home>.

June 8th-12th Activities

- June 8th - Unpack, explore the campus, and spend some time getting to know one another.
- June 9th - Orientation and scheduled activities (meals provided).
- June 10th- No scheduled activities.
- June 12th - First day of classes.

HOUSING INFORMATION

You will be housed in Fifth/Neville Apartments located at 4705 Fifth Ave, Pittsburgh, PA 15213. Apartment options will be 3 people (a single & a double bedroom) or 2 people (a double bedroom). **Rooms will NOT include bedding/bath linens, pots, pans, plates, utensils, or other kitchen items or cleaning supplies so you will need to bring these items with you.** You will each be randomly assigned a roommate.

Fifth/Neville Apartments

Apartments include interior features of central air-conditioning, cable ready, fully equipped kitchens and bathrooms.

AMENITIES: Laundry facilities, Internet and cable, study lounge, and large community room.

Computer Access

It is strongly recommended to bring a laptop, wireless internet is available. Please be sure to read the technology requirements in the student portal and contact Brittany Foster (brittanf@andrew.cmu) if there are any technology concerns.

Keys

Fifth Neville Apartments are fully outfitted with digital locks, you will use your sponsored ID cards to enter the building, apartments, and individual rooms within the apartment. If you lose your sponsored ID card, you will be responsible for paying for a new one.

Lockouts

For any lockouts during business hours, residents should visit the CES Summer Housing Guest Services Office (1st Floor of Stever House - 1030 Morewood Avenue, Pittsburgh, PA 15213) to obtain a temporary housing key until The HUB is able to provide a replacement. For any lockouts after 5:00pm during the week, or anytime on the weekends, participants will need to call University Police on the non-emergency line 412-268-6232 for assistance with gaining access to their apartments/rooms.

STIPEND PAYMENT/ MEAL SUBSIDY

We will provide you with \$1,500 dollars to use towards meals. There are several restaurants nearby the university and a grocery store easily accessible by public transportation. The stipend amount paid to you is \$1,500 with a combined total of \$3,000 (\$1,500 meal allowance/\$1,500 stipend). These will be paid in two installments; the first payment will be in the amount of \$2,250 (50% of the stipend amount (\$750.00) plus 100% of the meal allowance (\$1,500). The second payment will be in the amount of \$750 (the remaining 50% of the stipend) which will be paid after successful completion of the program. Delay in all paperwork/checklist items will affect the timing of payments.

ATTENDANCE POLICY

All students are expected to remain in Pittsburgh and on campus for the duration of the IT Lab Fellowship. Students are permitted one excused absence from an IT Lab event, class, or activity and are required to notify IT Lab staff prior to the absence. Additional unexcused absences may result in a failure to receive the final payment of 50% of the stipend.

Additionally, if you must leave for any reason on a weekend (family wedding, weekend trip, etc.) you must submit a written request at least two weeks prior to your absence to the program director. No trips will be permitted that will result in absence from a class or required activity.

You are expected to attend class every day, complete all course readings and assignments, and act responsibly throughout the program. Everyone is expected to participate in all IT Lab SSI classes, Lunch and Learns, and all Friday social activities. Students are not permitted to take part in any other programs, internships, fellowships, or work experiences during the seven-week program.

BENEFITS

Several benefits are provided to all IT Lab fellows, and several are provided for Heinz College fellows students exclusively.

Graduate School Scholarship Incentive

Students who successfully complete any IT Lab Fellowship and are admitted to the Master of Information Security Policy and Management (MSISPM) or Master of Information Management (MISM) program at the Heinz College are offered a generous scholarship. The current award to IT Lab alums is a minimum of a half-tuition scholarship and up to a full-tuition scholarship and stipend.

Career Services Workshops

Career Services provides top tier services to students, alumni, and employers. They will partner with you to provide effective tools and resources for graduate school search and development and guide you for life after college. They will help perfect your resume and teach you how to highlight your accomplishments.

Office of Admissions & Program Directors

Fellows will meet with the Admissions and the ISM program directors about Heinz College graduate degrees and the graduate school application process.

The fellows may each have one-on-one meetings with admissions and program staff members to learn more about applying to graduate school and preparing for life after college.

Site Visits and Speakers

The lecture series and site visits in Pittsburgh introduce you to domestic and international policy, topics and policy career fields.

SCHEDULE & PROGRAM

Seven weeks of daytime classes and lots of curriculum enhancing and social activities have been scheduled for your IT Lab Fellowship.

IT Lab 2023 Course Descriptions

Network Defenses

Instructor: Toby Myer (IT Lab Alumni)
Mon/Wed 3:40-5:00 pm

This course takes a hands-on approach, introducing students to network defenses to block, mitigate, and detect cyber-attacks. Firewalls, intrusion detection systems (IDS), and network sniffers are some of the tools students will learn to deploy and configure in a live lab environment. Time will also be spent learning how to analyze data to make conclusions about the network that is being monitored and actively attacked.

Introduction to Information Security

Instructor: Randall Trzeciak
Tue/Thurs 2:00-3:20 PM

This course introduces a variety of cyber security topics from a management, policy, and technology framework. Topics covered include; security of user-web interaction; safeguarding the Internet of Things; cyber-warfare; securing virtual, cloud, and mobile environments; and legal and ethical issues of security and privacy.

Data Management and Security

Instructor: Raja Sooriamurthi
Tue/Thurs 3:40-5:00 PM

Data plays a fundamental part in the functioning of the modern world. As custodians of this data, databases affect almost every aspect of our lives---education, employment, entertainment, tax, medical, commercial---to name a few. In the broader picture of information security, database security is a critical facet. In this course we will study how to design, build, work with, and secure a database.

Real World Projects

Participants will volunteer with businesses in the community to provide information technology and cybersecurity support. Participants will provide 5-8 hours of volunteer work to these businesses and present on their experiences at the end.

APPENDICES

IT Lab Staff Biographies

Randy Trzeciak holds a dual appointment between the Heinz College and the CERT Program at the Software Engineering Institute. Randy is Director of the Master of Science Information Security Policy & Management (MSISPM) at CMU and instructs the core introductory course in the program. At CERT, Randy is the Technical Director of the Security Automation Directorate in CERT and the Director of CERT's National Insider Threat Center. **412-268-7040** | Randallt@andrew.cmu.edu.

David Eber is the Director of Admissions and Financial Aid for Heinz College. David grew up in New York City and moved to the Pittsburgh area after graduating from Allegheny College with a BA in Political Science. David is a 2002 graduate of the Master of Public Management (MPM) program at Carnegie Mellon University. Prior to joining the staff at Heinz in 2003, David was an Assistant Director in the Office of Undergraduate Admissions at Carnegie Mellon. Throughout his career, David has been very interested in urban redevelopment, economic development, and the consolidation, cooperation, and regionalization efforts in the Pittsburgh region. David and his wife, Stacy, are the proud parents of two sons, Mason (5) and Chase (2). **412-268-3347** | Deber@andrew.cmu.edu

Brittany Foster is the Senior Academic Coordinator for the Master of Information Systems Management (MISM) program and the Master of Science in Information Security Policy and Management (MSISPM) program. In addition to supporting graduate programs, Brittany serves on the DICE (Diversity, Inclusion, Climate, and Equity) Wellness Team that connects the Heinz community with events and resources focused on well-being. Outside of her work at Heinz, Brittany is an advocate of mindfulness, enjoys exploring life with her dog Yogi Bear, and is involved in content strategy for small to medium-sized businesses. **412-268-2555** | Brittanf@andrew.cmu.edu

2023 IT LAB Acknowledgment of Receipt

It is the responsibility of all students to be aware of and adhere to all rules and policies of the seven-week SSI IT Lab program. Be sure to read over this handbook entirely. You will be updated of any revisions or additions by written communication to your Andrew account. Please provide signature of acknowledgment below.

I have received the handbook, and I understand that it is my responsibility to read and comply with the policies contained in this handbook and any revisions made to it.

Signature

PRINT NAME & Andrew ID

Date