

IPaT Fall Town Hall

September 6, 2019

IPaT Fall Town Hall



Learn about IPaT activities for Fall 2019

Jump start discussions for a key research pillar, "Charting the Human Technology Frontier"

Talk with your colleagues, discuss new ideas, and swap DragonCon stories...

email: ipat@gatech.edu



EVPR Leadership

IPaT / GVU / GTRI Seed Grants

Additional seed grants programs

MCIEP (with Emory)

Imlay Innovation Fund

Congrats to Cynthia and Alyson





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From #hashtags to Movements: Performance, Collective Narrative, and Erasure, a Black Feminist Perspective

Brooke Bosley and Susana Morris (Digital Media)

Workshop on Language, Technology, and Society

Lelia Glass (Modern Languages)

Getting Good: Using esports to inspire students in developing STEM skills

Laura Levy (IMTC), Andrew Partridge (GTRI), and Sean Mulvanity (GTRI)

Detecting and Measuring the Impact of Food Insecurity at Georgia Tech

Jon Sanford (Industrial Design) and Thomas Ploetz (Interactive Computing)

Artificial Intelligence and Interactive Digital Entertainment 2019

Anne Sullivan (Literature, Media, and Communication) and Mark Riedl (Interactive Computing)

Acoustic Sensor Deployment in the EcoCommons

Emily Weigel (Biological Sciences), Adam Beteul (Atlanta Audobon Society), David Anderson (ECE), and Matthew Swarts (GTRI)

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Cynthia Moore Emerging Leaders Development Program



Alyson Powell Key
GT Faces of Inclusive Excellence



IPaT Values



One GT

We will operate collaboratively by sharing knowledge and resources, all for the greater good of Georgia Tech.

Innovation

We will support a culture of creativity, thought leadership and boundary-pushing ideas, and be unafraid of failure.

Trusted Partner

We will be transparent, meet deadlines, and work together to enhance and grow valuable relationships on and off campus.

Diversity

We will recognize, respect, and embrace inclusion and fairness throughout all aspects of our research, practice and operations.



IPaT's Vision, Mission and Research Pillars

Shaping the future of human-centered systems, environments and technologies to promote satisfying, healthy and productive lives.

Catalyze interdisciplinary research between faculty, students, and industry.

Provide the continuity and capacity to address societal challenges.

Advocate for socio-technical change that improves the human condition.

Educate human-centered engineers, scientists, designers, business leaders, and policy makers.









Transdisciplinary Research Pillars

Lifelong Health and Wellbeing

Smart Cities and Inclusive Innovation

Platforms and Services for Socio-Technical Systems

Shaping the Human Technology Frontier



Lifelong Health and Wellbeing



Aging to Pediatrics

Mobile Health to Healthy Environments

Startups to Major Research Centers

Seed Grant Reviews Underway

Critical Research Infrastructure

New CMS Medicaid Data

Closing the Policy Gap

Study Finds Gaps in Treatment for Children with ADHD on Medicaid

Children on Medicaid May Lack Sufficient Access to Dental Care



From pediatrics to aging, IPaT's continuum of healthcare research is working to promote and enable vibrant and lifelong physical and mental health.



Smart Cities and Inclusive Innovation

GA Smart Communities receive funding and support to envision, explore, and plan for their smart futures.

- First class: City of Albany, City of Chamblee, Chatham County, Gwinnett County + GT Researchers and Partners
- Second class: Columbus Consolidated Govt, Macon-Bibb County, City of Milton, City of Woodstock
 + GT Researchers and Partners

Sending good vibes to NSF SCC proposal writers!

GT attends Smart City Expo ATL: Sept 11-13

SCII Community Gathering : Oct 1 (9:30-11am)

Speakers: Yogi Joshi (ME); James Tsai (CEE); Osvaldo Cleger (Modern Language); Anjali Thomas (Sam Nunn); and Tarek Rashi (Architecture).





Developing innovative approaches to shaping resilient and sustainable communities through interdisciplinary collaboration in technology and policy.



Shaping the Human Technology Frontier



Wearable Fashion and Technology Panel event to be held in Spring 2020. Collaboration between WCC and Fashion Group International Atlanta.

Future of Sports Technology VIP section launched (three thrusts are Wearable Tech for Performance, Augmenting the Fan Experience, and E-Sports)

FY20 Seed and Engagement Grants

Workshop on Language, Technology, and Society Lelia Glass (Modern Languages)

From #hashtags to Movements: Performance, Collective
Narrative, and Erasure, a Black Feminist Perspective
Brooke Bosley and Susana Morris (Digital Media)
Getting Good: Using esports to inspire students in developing

STEM skills
Laura Levy (IMTC), Andrew Partridge (GTRI), and
Sean Mulvanity (GTRI)

Artificial Intelligence and Interactive Digital Entertainment 2019
Anne Sullivan (Literature, Media, and Communication) and Mark
Riedl (Interactive Computing)



Exploring new ideas in user experiences that foster creativity, stimulate learning and enable productive collaboration. Through this initiative, we're researching and developing novel wearable computing, assistive, augmented reality, and gaming technologies.

Platforms and Services for Socio-Technical Systems



Sea Level Tools for Emergency Planning & Response

API and dashboard online at sealevelsensors.org

Partnerships with City of Savannah, Chatham County, GDOT, Jenkins High School, etc

Project storage and API hosting work in progress for Smart Cities & Smart Campus projects (Marta, Coda, LBC, and the SeaLevel sensing).

FY20 Grants

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Acoustic Sensor Deployment in the EcoCommons Emily Weigel (Biological Sciences), Adam Beteul (Atlanta Audobon Society), David Anderson (ECE), and Matthew Swarts (GTRI)



Merging physical and digital worlds with complex data analytic and communication capabilities. We are building new network infrastructure technologies with the goal of creating connected systems that support communities.



IPaT • GTRI













Translating Mission to Action

Catalyze interdisciplinary research between faculty, students, and industry.

Provide the continuity and capacity to address societal challenges.

Advocate for socio-technical change that improves the human condition.

Educate human-centered engineers, scientists, designers, business leaders, and policy makers.

General IPaT Support Mechanisms

Annual People and Technology Forum

Annual Seed Grants
Faculty recruiting; Startup support

Annual "IPaT Office Hours"

Townhall meetings, Faculty Retreats, Research Showcases

Convergence Innovation Competition (Fall and Spring)

Faculty-led Symposiums; Industry Roundtables

Thursday Think Tanks

Current and Prospective Industry Partnerships

Proposal Support; Marcom Support; Event Support....

Research Infrastructure and Lab Support



IPaT Capabilities and Support for the GT Research Communities

Professional Staff

- Research Operations (Matt Sanders)
- Business Operations (Cynthia Moore)
- Marketing and Communications (Alyson Powell Key)
- Industry Partnerships (Siva Jayaraman)
- Grants and Finance (Francine Lyken)
- Think Tanks and CIC (Faith Sumpter)
- Space and Events (Don Schoner)



Applied Research and Faculty Engagement

- Leigh McCook, Deputy Director (GTRI)
- Russ Clark, Maribeth Gandy and Debra Lam, Managing Directors



Examples of IPaT Research Infrastructure









The **Georgia Tech Aware Home** is an interdisciplinary research endeavor involving faculty and student researchers from multiple domains across campus.

Aware Home researchers are interested in Health and Well-being, Digital Media and Entertainment, and Sustainability, investigating how new technologies can impact the lives of people at home.

The Smart Sea Level Sensors project is a partnership between Chatham Emergency Management Agency officials, City of Savannah officials, and Georgia Tech scientists and engineers who are working together to install a network of internet-enabled sea level sensors across Chatham County.

The real-time data on coastal flooding will be used for emergency planning and response.

Scientists have struggled to understand dolphin vocalizations, but new computer tools to both track dolphins and decode their complex vocalizations are now emerging.

Georgia Tech scientists have created a wearable underwater computer, **CHAT** (Cetacean Hearing and Telemetry), to establish a bridge for communication between humans and dolphins.

An IPaT/GVU Engagement grant has funded the **Wearable Technology and Society** course.

The La Mandragora headpiece, developed for drag queen Edie Cheezburger, responds to light by blooming and unfurling.



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The real

flooding emerger **IPaT RI Priorities for FY20**

Data sharing for smart communities

New CMS Medicaid datasets

The Sma Hi Trust Interim Assessment

Chathan Agency Facilities directory for IPaT

network Aware Home, SimTigrate and HomeLab to support MCI / aging research programs Also Pediatric HomeLab



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IPaT Communications

Research Publications







New Websites!







Convergence Innovation Competition (CIC)

Final Judging Wednesday, Nov 13

Bi-Annual Competition: Student project teams develop and present viable working prototypes

11 years running
 >250 students/year
 Students from diverse majors and schools

Categories (Fall 2020)

- Climate Solutions
- Health on the Move
- Players & Fans

Sponsor: Verizon

Partners: Global Change Program, CREATE-X, GT Athletic

Association

cic.gatech.edu



Benefits Include:

Prizes, Exposure, Contacts, Real World Feedback IP Retained

Think your idea doesn't fit?
Ask us—categories are intended to shape, not exclude.



IPaT Think Tanks

IPaT Fall Town Hall	Sept 5
Global Center for Medical Innovation (GCMI): The Pathway to Commercialization of Medical Technologies	Sept 12
Human Centered AI	Sept 19
Getting Good: Using esports to inspire students in developing STEM skills	Sept 26
SPRINT (Sports Innovation)	Oct 3
Your Idea Here	Oct 10
IPaT New Faculty : Making GT Work	Oct 17
Detecting and Measuring Food Insecurity at GT	Oct 24
Innovation in STEM	Nov 7



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IPaT Space ... the final frontier

IPaT@Centergy

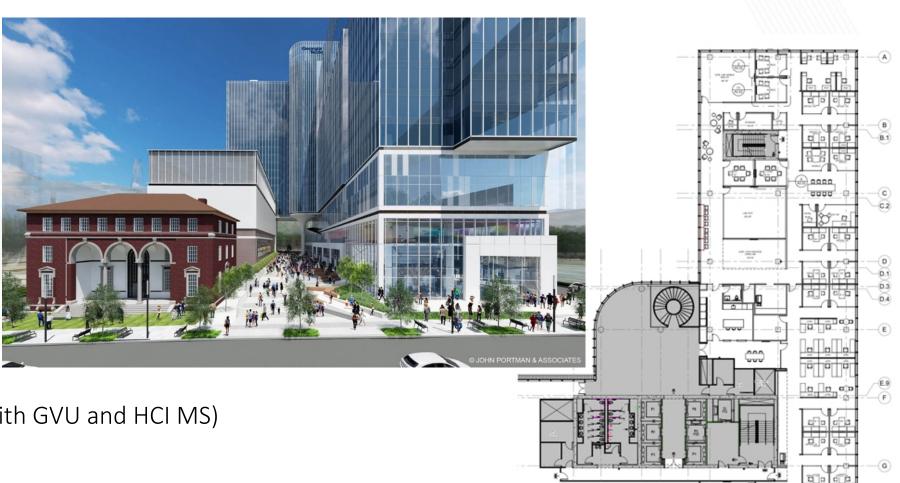
- Collab hub
- Staff hub

IPaT@Coda

- Health data / apps
- Ideation lab

IPaT@TSRB

- Student app lab (shared with GVU and HCI MS)
- RNOC labs lending library
- Interactive Media labs and installations



IPaT Fall Schedule

IPaT Fall Town Hall Sept 5, 2019

GVU / IPaT Research Showcase Oct 30, 2019

Thursday Think Tanks Thursdays, 3:30-5pm

Sept 12, 19, 26; Oct 3, 10, 17, 24; Nov 7

SCII Semester Meetup Oct 1, 2019

Convergence Innovation Nov 13, 2019

Competition (CIC)

IPaT Research Directors

Sept TBD, Oct TBD, Nov TBD; 8:30-10am

ITU Kaleidoscope Dec 2-6, 2019

IPaT Holiday All Hands Dec 11, 2019





Panel: Charting the Human Technology Frontier

Thad Starner

Professor, School of Interactive Computing Staff Research Scientist, Google

Anna Stenport

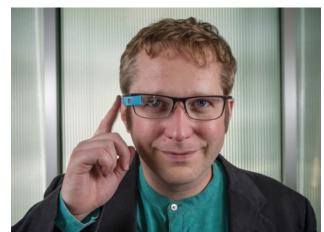
Chair and Professor, School of Modern Languages Founding Co-Director, The Atlanta Global Studies Center

Anne Sullivan

Assistant Professor, Digital Media School of Literature, Media, and Communication

Gil Weinberg

Professor and Director, Center for Music Technology School of Music









Fireside Chat

Scott Davis
Principal Client Lead
North Highland Group

Keith Edwards
Professor, Interactive Computing
Director, GVU Center

Maribeth Gandy
Principal Research Faculty
Managing Director, Research @ IPaT







