



WHAT IS INSTITUTIONAL RESEARCH & PLANNING?

Institutional Research & Planning (IRP) is a broad category of work requiring whole brain thinking. We are a support unit consisting of data analytics professionals with an interdisciplinary blend of technical and creative skills. These skills are used to inform campus decision-making, planning, and investigation in areas such as admissions, financial aid, enrollment management, staffing, student life, finance, facilities, or athletics.

Institutional researchers collect, analyze, report, and utilize quantitative and qualitative data about their institution's students, faculty, staff, curriculum, course offerings, and learning outcomes. From admissions to student services, to academic departments, institutional researchers are some of the only employees in higher education who communicate with nearly every department on campus.

Institutional research is the sum total of all activities directed at empirically describing the full spectrum of functions (educational, administrative, and support) at a college or university. Institutional research activities examine those functions in their broadest definitions and, in the context of both internal and external environments, embrace data collection and analytical strategies in support of decision making at the institution.

Source: Middaugh, M.F. (1990). "The Nature and Scope of Institutional Research," Organizing Effective Institutional Research Offices. New Directions for Institutional Research, no. 66. San Francisco, Jossey-Bass.



MEET THE TEAM

JASON WANG, PH.D.



Dr. Jason L. Wang serves as the Interim Senior Director and the Director of Data Management in the Office of Institutional Research and Planning (IRP). He leads the IRP team in its efforts to provide accurate research, analysis, reporting, and decision support for Georgia Tech. His mission is to ensure the ethical and responsible management of data within IRP and to promote data literacy across Georgia Tech.

Jason started in IRP as a graduate assistant performing data analysis and writing reports and has since become an active and contributing member of the institutional research community. He has delivered presentations at state, regional, and national IR conferences, and is the co-author of the chapter "Data Strategy versus Information Technology Planning" in the book Data Strategy in Colleges and Universities: From Understanding to Implementation.

Jason teaches COE2001 (Statics) and COE3001 (Mechanics of Deformable Bodies) at Georgia Tech for the Honors Program and has also joined the faculty ranks of the Georgia Tech Oxford study abroad program. Jason is a proud Ramblin' Wreck from Georgia Tech having earned his B.S. (2008) and M.S. (2010) in Mechanical Engineering and his Ph.D. in Bioengineering in 2018. He enjoys spending his days off gardening, hiking, camping, and relaxing with his friends, family, and two dogs.



Samantha James is a Data Management Specialist in the Office of Institutional Research and Planning, where she supports the unit by managing data projects, processes, and protocols to ensure integrity, security, reliability, and efficiency. Her responsibilities include longer term data projects, managing business operations, and unit portfolio management for ad hoc request, institutional reporting, and projects.

Samantha James has over 18 years at Georgia Tech in both academic and research unit operations, with the last four years in Institutional Research. Before joining IRP, she occupied roles in Sponsored Post Award Administration, Accounting, Administrative Support, and Student Human Resources. In these roles, she trained, advocated, and analyzed procedures, voicing techniques to increase process productivity. She assisted in the development and tactical implementation of administrative improvement, financial strategy, and department-wide trainings to incorporate efficiency and consistency among those tasks to facilitate better organizational practices. She is now an active contributor to the Institutional Research field through volunteering efforts on professional committees, presenting sessions at professional gatherings, and being a resource where and when needed to colleagues nationwide. She currently serves as Treasurer of The Regents' Administrative Committee - Institutional Research & Planning, Member-at-Large, Vendor Relations for The Southern Association of Institutional Research, and is a member of The Association of Institutional Research, The Association of American Universities Data Exchange (AAUDE) and The Project Management Institute, Atlanta Chapter.

Samantha has a Finance BSB, MBA, and PMP Certification. Samantha's greatest qualities, per Gallup-CliftonStrengths, is she is analytic, consistent, disciplined, productive, and promotes harmony in her surroundings. In her free time, she likes to participate in activities that promote health and physical fitness, encourage mental and spiritual well-being, as well as spend time with friends and family.

SAMANTHA JAMES





DONYELL FRANCIS



Donyell Francis is the Data Management Specialist for the Office of Institutional Research and Planning where he supports Georgia Tech's institutional research and decision support efforts. His responsibilities include data collection, analysis, and data visualization.

Donyell Francis has over 20 years of experience in higher education administration with a focus on institutional research, information technology, and business intelligence tools. He has worked at both the institution level in both I.R. and I.T. and at the state system level for both the Technical College System of Georgia (TCSG) and the University System of Georgia (USG). He has also served as an IPEDS educator since 2012 and an IPEDS state coordinator for several years while working at TCSG.

Donyell Francis earned his B.S. in Computer Information Management (2006) from Life University College of Arts and Sciences and has a M.S. in Information Technology (2011) from Southern Polytechnic State University now Kennesaw State University.



Daniel is IRP's Data Scientist. After earning his Bachelor's Degree (DePaul University, 2008), he moved to South Korea to work as a District Supervisor with the Korean Department of Education. In addition to teaching students, he managed and trained teachers regarding pedagogy and best practices.

Emigrating back to the United States, Daniel earned his MBA (University of Illinois Urbana-Champaign, 2018). He then began work as a Business Analyst in the Chicago private sector, emphasizing process enhancements and leveraging technology for improved decision making.

In October of 2019 he joined Georgia Tech as a Business Analyst with the Office of Undergraduate Admission. Daniel earned an MS in Economics (Georgia Tech, 2022) and with his curiosity still not satiated, pursued an additional MS in Computational Analytics at (what was once known as) the North Ave Trade School. From Greek Mythology, to Behavioral Economics, to Stochastic Processes, understanding how things are interconnected and translating that insight to action is his passion. This is reflected in his work on developing models and creating functions, to turn questions / problems into answers / solutions which are quantifiable and objective. In his free time...Error #404...on that note, GO JACKETS!

DANIEL LYCZAK





MEGHAN MULLANEY Meghan is a data scientist in Institutional Research and Planning at Georgia Tech. In this role, she works with multiple internal and external data sources to prepare data reports, analyses, and visualizations to support decision making at Georgia Tech.

> Meghan has a BA (English) from the University of Georgia as well as an MA (English) and MS (Data Science and Analytics) from Clemson University. She came to Georgia Tech with a wide variety of work experiences in roles ranging from communications and public affairs to research development to data analytics at University of Texas at Austin, Clemson University, and Georgia Tech. These experiences have provided a deeper understanding of and appreciation for the transformative and communicative power of data analytics and visualization paired with language.

> When she isn't poring over spreadsheets, Meghan can be found spending time with her family, reading whatever she can get her hands on, running very, very slowly in local races or, on a certain weekend every year, sauntering down Peachtree Street dressed as a silver robot.

Valerie Roberts is a business analyst and self-taught graphic artist/web developer in the Office of Institutional Research & Planning (IRP). She maintains IRP's website, designs infographics, and assists other analysts with data projects. Valerie has acquired a working knowledge of descriptive statistics, SQL, query modeling, and research methodologies.

Valerie has a Bachelor of Arts in English Literature from the University of Miami and earned a graduate certificate of Information Technology Foundations from Kennesaw State University. She has a lifetime of experience working on projects where technology and creativity intersect. When she is not studying coding, analytics, and graphic design, Valerie enjoys drumming, reading, and watching movies and anime.



BEN CHAPMAN



Ben Chapman is a Business Analyst for the Office of Institutional Research and Planning where he assists in reporting data to external surveys, compiling reports and producing visualizations to improve data access across the campus.

After earning his Bachelor's Degree (University of Newcastle Upon Tyne, 2004) Ben started work in Admissions and Appeals at the local government level, before moving on to work in schools as an IT Network and Media Development Manager where he worked on MIS implementation and IT infrastructure for number of institutions.

For leisure, he enjoys playing and assembling guitars, designing and building sound systems, and walking with his wife.

ACCOMPLISHMENTS



SAMANTHA JAMES

- Obtained Master's In Business Administration with Honors, from Kennesaw State University in July 2021
- Obtained PMP Certification on July 1, 2023
- Gave presentations at the following conferences/meetings:
 - o AIR 2022
 - o SAIR 2022
 - o SAIR 2023
 - RAC IRP
 - Fall 2022
 - o GT Data Days 2022
 - o GT Data Days 2023
 - Interact USG 2023
- · Served on the following committees:
 - Served as reviewer of proposals on SAIR 2022 Proposal Review IR Track Committee
 - Served as chair of SAIR 2023 Best Practices in Reporting Committee Proposal Review Committee
 - Served as one of the founding committee members of GT Data Days 2022
 - Member of the GT Data Days Committee in 2023
 - Implemented a practice in IRP that won IRP office 1st place for the Best Innovative Practice Award at SAIR 2022 conference.





DONYELL FRANCIS

- National IPEDS educator for 11 years and recently accepted to continue for a 12th year.
- Data, Definitions, and Context Avoiding and Preventing Misuse and Misinterpretation of Data was presented at SAIR 2023 and interactUSG conferences. Delivered jointly with Benjamin Chapman.





DANIEL LYCZAK

 Dynamic Documentation with Data Science Resources and Practices was presented at SAIR 2023 conference.



MEGHAN MULLANEY

 Master of Science in Data Science and Analytics completed at Clemson University, December 2022. The program, blending principles of mathematics and business, features significant coursework in machine learning.





VALERIE ROBERTS

- Graduate Certificate in Information Technology Foundation completed at Kennesaw State University, July 2021.
- Conversations with Customers: Reinventing an IR Website as a Communications Platform was presented at SAIR 2023 conference.
- Redesigned IRP's website to be more modern, user-friendly, and visually appealing:





BENJAMIN CHAPMAN

 Data, Definitions, and Context - Avoiding and Preventing Misuse and Misinterpretation of Data was presented at SAIR 2023 and interactUSG conferences. Delivered jointly with Donyell Francis.



WORK WE DO

Institutional Research and Analysis

The following are examples of some reports that IRP has completed in the past two years. Although this is by no means an exhaustive list, it gives a good indication of the projects IRP has worked on in the past two years.

Academic Data

- Full-Service Program Analysis
 - APR Data Portfolio
 - Admissions, Enrollment, and Graduation Data
 - Peer Institution Analysis
 - Labor/Market Analysis
- STEM Designated Programs
 IRP worked with several colleges to determine programs that could be classified as STEM designated. These are programs that do not have a STEM Classification of Instructional Program (CIP) but where more than 50 percent of required courses are STEM courses.
- Classification of Instructional Programs Review
 The Classification of Instructional Programs (CIP) provides a taxonomic scheme that supports the accurate tracking and reporting of fields of study and program completions activity. The CIP was originally developed by the U.S. Department of Education's National Center for Education Statistics (NCES) in 1980, with revisions occurring approximately every 10 years. The CIP 2020 contains more than 300 new programs of study. The CIP Review examined Georgia Tech's programs and the codes assigned to them.



Student Data

• First-Year Outcomes

This study examined both freshman and transfer students in their first year at Georgia Tech. The study examined grade forgiveness policies for freshman students and the courses frequently repeated by freshman. The study also examined how transfer students performed in their first year at Georgia Tech and the subject area/courses students performed poorly in.

• Freshman Retention and Graduation

The Freshman Retention and Graduation study reports on the progress of transfer students to Georgia Tech in student success including retention and graduation. Each year, different aspects of retention and graduation are examined to provide additional context to programs or behaviors that may affect student graduation or time-to-graduation at Georgia Tech.

Transfer Graduation and Retention

The Transfer Retention and Graduation study reports on the progress of transfer students to Georgia Tech in student success including retention and graduation. Each year, different aspects of retention and graduation are examined to provide additional context to programs or behaviors that may affect student graduation or time-to-graduation at Georgia Tech.

Institutional Planning and Support

Institute Data

- Assist with Open Records and Solomon Act requests
- Provide data for grants such as T32 Training Grants and Minority Grants
- Provide data for Institutional Review Board (IRB) approved requests
- Ad hoc data requests
- Data in support of research for academic units
- Disclosures
 - SACS
 - Student Success
- Institute Strategic Planning Support
- Analysis of U.S. News & World Report rankings data



Student Data

- Student disclosure on enrollment and success metrics for College of Engineering accreditation by the Accreditation Board for Engineering & Technology (ABET)
- Data for COE Center for Engineering Education and Diversity grants
- Enrollment projections

External Reporting

- Federal and State compliance reporting (e.g., IPEDS, USG fiscal/other)
- Non-governmental surveys (e.g., AAUDE, AAUP)

> IRP Projects

- Collaborative assistance with Summer Programs
- Collaboration with Georgia Power and Georgia Dept of Labor on data usage best practices
- · NSF research and interactive dashboard
- Redesigned IRP website to be more modern, user-friendly, and visually appealing
- Fact Book -- archiving Georgia Tech's year in numbers







SURVEY INVENTORY

- AAMI Grant USG's African-American Male Initiative
- AAUDE Faculty Salary Survey
- AAUDE First Time Freshman Profile Survey
- AAUP Faculty Salary Survey
- ARL Library Salary Survey
- American Talent Initiative (ATI)
- Atlanta Business Chronicle Area's Largest Colleges/Universities
- · Atlanta Business Chronicle Top Employers
- Big Future (f/k/a, College Board)
 - o Annual Survey of Big Colleges Common Data Set
 - Section G Tuition Update
- Cambridge Associates Tuition Survey
- CGS International Graduate Admissions Survey
- Clarivate Analytics Global Institutional Profiles Project
- · Common Data Set
- Consortium for Student Retention Data Exchange (CSRDE)
- Council of Graduate Schools (CGS) GRE Survey of Graduate Enrollment
- IPEDS
 - 12 Month Enrollment
 - Academic Libraries
 - Admissions
 - Completions
 - Fall Enrollment
 - Finance
 - Graduation Rates
 - Graduation Rates 200%
 - Human Resources
 - Institutional Characteristics
 - Outcome Measures
 - Student Financial Aid

- Moody's
 - Tuition Survey
- NACUBO-TIAA Study of Endowments (NTSE)
- NSF/GSS Survey of Grad Students & PostDocs
- NSF-HERD Higher Education Research & Development Survey
- · Peterson's
- Annual Survey of Undergraduate Institutions
- Survey of Undergraduate Financial Aid
- · Princeton Review
- Undergraduate Survey
- Undergraduate Entrepreneurship Survey Support
- Student Achievement Measured (SAM)
- Southern University Group (SUG)
- · Library Salary Survey
- SREB Survey
- · Tuition and Fees
- Times Higher Education World University Rankings
- University of Wyoming Tuition & Fees Survey
- · US News & World Report
- · Best Colleges Main Statistical Survey
- Finance Survey
- · Financial Aid Survey
- Graduate Engineering Survey Support



PROJECT INVENTORY

- Academic Program Review Data Portfolios
- Academic Project and Data Support
- USG Budget Narratives
- USG Data Collection Review and Validation
- Enrollment Forecasting Models
- Institute Fact Book
 - PDF
- · Faculty Salary Benchmarking
- Full Time Freshmen (FTF) Cohort Analysis
- · General Research Reports
- Institute Disclosures
 - Student Achievement
 - Student Demographics
 - o Students' Right-to-Know
 - Faculty Demographics
 - Facilities and Housing
 - College of Engineering (ABET Accreditation)
- Support Open Records Requests
- Support SACSCOC Accreditation

- · Strategic Planning and Initiatives Support
- Summer and Special Session Initiatives Support
- T32 and NRT Training Grant Support
- Budget Reform Support
- · Differential Tuition Analysis and Support
- President's Goals: Student Success Outcomes Analysis and Support
- US News Rankings Analysis
- · STARS Report Support
- Institute Strategic Plan Progress Tracker Support
- · Institute Fact Check Catalog
- · Steppingblocks Implementation Support
- IRIS Membership Support
- · 2022 Data Days
 - Co-founding unit
 - Planning and Support
- 2023 Data Days Planning and Support
- · IRB Research Project Data Support
- Bond Rating Presentation Support



Office of Institutional Research and Planning Georgia Institute of Technology Atlanta, Georgia 30332-0530 (404) 894-3311

www.irp.gatech.edu

For more information contact us at support@irp.gatech.edu