Kotryna Vyshnevskyy
Research Technologist I
Center for Advanced Communications Policy

CURRENT FIELDS OF INTEREST:

- **Project and Data Management**
- **Usability and Accessibility Testing**
- **Analytics and Health Technology**
- **Process Improvement and Workflow Optimization**

I. MASTERY OF A COMPLEX FIELD

A. Publications, Presentations, Posters

1. Published Journal Papers

1.1 Woodruff, R., Kaholokula, J., Riley, L., Tong, X., LaTonia, R., **Diktonaite, K.,** Fleetwood, L., and Vaughan, A. "Cardiovascular Disease Mortality Among Native Hawaiian and Pacific Islander Adults Aged 35 Years or Older, 2018 to 2022." *Annals of Internal Medicine*, 15 Oct. 2024, https://doi.org/10.7326/M24-0801.

1.2 Sharma, S., Guan, X., Hou, Y., Harvey, J., Lamba, P., Li. J., Dorsey, A., **Diktonaite, K.,** and Li, C. "Smyd2 Deficiency Protects Against Atherosclerotic Plaque Formation Through Modulation Of Oxidative Stress." *Circulation Research*, vol. 133, no.1, 13 Oct. 2023, https://doi.org/10.1161/res.133.suppl_1.P3022.

1.3 Zheng X., **Diktonaite, K.,** and Qiu, H. "Epigenetic Reader Bromodomain-Containing Protein 4 in Aging-Related Vascular Pathologies and Diseases: Molecular Basis, Functional Relevance, and Clinical Potential." *Biomolecules*, vol. 13, no.7, 15 July 2023, https://doi.org/10.3390/biom13071135.

B. Key Delivered Products

1. **Name/ Title for Key Delivered Product: CACP Repository Data Workflow**
   Sponsor/to whom delivered: CACP – GA Tech
   Date range for work: Dec 2025 – Current
   Product Description: The Repository Data workflow is an automated SharePoint-based system designed to standardize and organize the process of requesting repository data. It serves as a centralized resource for the CACP research team to track and manage all individuals requesting access to repository data in a consistent and auditable manner. This workflow supports cybersecurity and compliance requirements by ensuring that all data requests follow established Georgia Tech and IAC policies for requesting and handling institutional data. Researchers can send a standardized request form to data requestors, guiding them through a step-by-step questionnaire that captures the necessary information, approvals, and intended data use before access is granted.
   Candidate's specific technical contributions: Vyshnevskyy identified the need for a more formalized and organized process for managing repository data requests and independently designed and implemented an automated

workflow in SharePoint. Recognizing gaps in the existing request process, Vyshnevskyy is developing a structured system that standardizes how data requests are submitted, tracked, and reviewed. This includes defining and configuring a step-by-step request form, identifying key questions to capture essential details about the requested data, intended use, and compliance requirements, and translating those needs into an intuitive and accessible format for requestors. The resulting workflow will improve clarity for individuals submitting requests, streamlines internal review for the research team, and enhances consistency, accountability, and policy alignment across repository data access requests.

2. **Name/ Title for Key Delivered Product: Mark- 10 Easy MESUR Force Stand**
   Sponsor/to whom delivered: CACP – GA Tech
   Date range for work: June 2025 – Sept 2025
   Product Description: The Mark- 10 Force Stands are engineered to perform a wide range of tension and compression tests, including break testing, cycling, limit testing to a load or distance, load holding, average force testing, and more.
   Candidate's specific technical contributions: Vyshnevskyy managed the hardware and software set up when technical issues arose. Calibration was due and a researcher requested a more advanced version of the software. Vyshnevskyy handled all shipping and vendor communication to address calibration issues. Vyshnevskyy managed all firmware updates and incorporated EMP-COMP 1 software package in a timely manner aiding in data collection procedures.

3. **Name/Title for Key Delivered Product: Human Factors Lab AI PC**
   Sponsor/to whom delivered: CACP – GA Tech
   Date range for work performed by the candidate: May 2025 – Current
   Product description: The AI PC, built on the MSI Z790-A MAX motherboard, is a high-performance research workstation designed to support advanced human factors research. This system is purpose-built to manage and process large, complex datasets while enabling AI-driven analysis, summarization, and report generation for research projects. Its overall capabilities are optimized for AI and data-intensive workflows, including machine learning model execution, statistical analysis, and automated synthesis of research findings. This AI PC is intended to meet the growing computational and analytical demands of human factors research by providing a reliable platform for AI processing, scalable project workloads, and future expansion as research needs evolve.
   Candidate's specific technical contributions: Vyshnevskyy independently designed, built, and developed the AI research workstation from the ground up for the Human Factors Laboratory. This included selecting and procuring all hardware components, managing the full procurement process, and assembling the system to support AI and data-intensive research workloads. Vyshnevskyy initialized and configured the system environment by performing firmware and BIOS updates, installing the operating system, and updating all required drivers. The system is currently in the active troubleshooting and optimization phase, with ongoing efforts focused on

resolving CPU and motherboard configuration issues. Vyshnevskyy is systematically diagnosing hardware compatibility, firmware settings, and system stability to ensure reliable performance. Throughout this process, Vyshnevskyy continues to monitor, test, and refine the system configuration to achieve full operational readiness for research use.

4. **Name/ Title for Key Delivered Product: Ubiquiti UniFi Camera Hardware & Software Management**
   Sponsor/to whom delivered: CACP – GA Tech
   Date range for work: Apr 2025 – Sept 2025
   Product Description: The UniFi system provides an integrated networking and security solution for the research lab, centered around the Dream Machine Pro Max for routing, firewall protection, and system management. UniFi access points and PoE switches deliver reliable, high-speed connectivity, while PTZ, AI 360, and G5 Flex cameras provide comprehensive surveillance through the UniFi Protect platform. All devices are managed through a single UniFi interface, ensuring a secure, efficient, and scalable lab environment.
   Candidate's specific technical contributions: Vyshnevskyy independently designed, configured, and deployed the entire UniFi network and security ecosystem for the research lab, handling every stage of the setup from initial planning to full system integration. This included installing and optimizing the Dream Machine Pro Max as the central controller, configuring multiple UniFi access points and PoE switches, and deploying PTZ, AI 360, and G5 Flex. She also integrated the system with the lab's TV display to provide real-time visual oversight of research activities and ensured seamless communication between all devices. In addition, Vyshnevskyy fully configured an iPad workstation in alignment with Georgia Tech's strict security policies, enabling secure mobile access to the system. Through extensive troubleshooting, calibration, and testing, she built a synchronized, fully automated environment that records research sessions, maintains secure data flow, and supports the operational needs of the lab.

5. **Name/Title for Key Delivered Product: Human Factors Lab Development**
   Sponsor/to whom delivered: CACP – GA Tech
   Date range for work: Feb 2024 – Current
   Product Description: The Human Factors Lab is a specialized research facility designed to study how individuals interact with systems, products, environments, and technology. The goal is to improve usability and safety, efficiency, and overall user experience by analyzing human behavior, cognition, and physical interactions.
   Candidate's specific technical contributions: Vyshnevskyy leads the setup and implementation of the laboratory, equipping it with cutting-edge technology, audio and visual components, hardware, and software. This effort ensures seamless support and accessibility for scientists conducting diagnostic testing, participant observation, and data analysis.

6. **Name/Title for Key Delivered Product: NETGEAR Routing System**
   Sponsor/to whom delivered: CACP – GA Tech
   Date range for work performed by the candidate: March 2024 – Aug 2024
   Product description: The NETGEAR router in the lab is a high-performance networking device designed to support multiple simultaneous connections, ensuring

seamless communication between various research equipment. It provides high speed data transfer, security, firewall protection, and ensures secure network access.
Candidate's specific technical contributions: Vyshnevskyy executed the technical setup of the NETGEAR router for the lab, configuring network parameters, optimizing bandwidth allocation, and ensuring seamless connectivity for multiple research devices.

7. **Name/Title for Key Delivered Product: Toshiba E3015AC Copier**
   Sponsor/to whom delivered: CACP – GA Tech
   Date range for work performed by the candidate: Sept 2024 – Dec 2024
   Product description: Toshiba E3015AC is a copier provided through GA Tech's copier program. It consists of several features such as copying, printing, scanning, and faxing. Toshiba E3015AC has a multi-position stapler, is network ready, and includes all maintenance and supplies within the 48-month lease for $97 month.
   Candidate's specific technical contributions: Vyshnevskyy conducted a comprehensive cost analysis, comparing the allocated expenses of CACP's outdated Ricoh copier with the investment in a new Toshiba copier. Successfully managed the setup and configuration of the new copier, integrating *PaperCut* software across all CACP devices to enhance printer management and optimize resource utilization.

C. Professional Registration/Certifications Attained

1. **Project Management Professional (PMP); Project Management Institute (Sept 2025**
2. **Leadership in Project Management (COMP 7320); Georgia Tech Professional Education (July 2025)**
3. **Technical Project Management (COMP 7310); Georgia Tech Professional Education (July 2025)**
4. **Strategic Project Management (COMP 7300); Georgia Tech Professional Education (May 2025)**
5. **CompTIA Certification (A+); CompTIA (Oct 2024 – Oct 2027)**

D. Awards

1. **Research Administration & Spotlight Award (RA&S); Georgia Tech Research (May 2025)**
   Award for demonstrating exceptional collaboration, innovation, and research support at Georgia Tech's Center for Advanced Communications Policy, exceeding expectations in both technical problem-solving and direct research contributions.

E. Professional Affiliations

1. **Registered Member, Project Management Institute (PMI), Atlanta Chapter (2025 – Current)**

II. TECHNICAL CONTRIBUTIONS AND INNOVATION

A. Research/Technical Reports

1. **Name/Title for Key Delivered Technical Report: Laser Inspection and Safety**
   Sponsor/to whom delivered: CACP – GA Tech
   Date range for work performed by the candidate: Oct 2025 – Nov 2025
   Report Description: Laser cutters fall under the Georgia Tech Laser Safety Program, requiring formal inspection and documentation to ensure safe operation and regulatory compliance. This report outlines the equipment classification, verifies required safety controls, and designates a Laser Supervisor responsible for oversight and training. The inspection process is essential for reducing risks, maintaining proper safety standards, and ensuring all laser use aligns with campus policies.
   Candidate's specific technical contribution: Vyshnevskyy completed the required Laser Supervisor training to ensure the lab met Georgia Tech's laser safety standards and actively advised staff and faculty on proper laser operation and safety practices. They developed and provided clear, policy-aligned documentation within the lab to support compliant and safe use of the equipment. Additionally, Vyshnevskyy supplied essential safety materials, such as a fire blanket, and coordinated directly with EHS management during the formal inspection process. These efforts strengthened overall safety, compliance, and readiness within the department's laser operations.

2. **Name/Title for Key Delivered Technical Report: HomeLab Website Updates**
   Sponsor/to whom delivered: CACP – GA Tech
   Date range for work performed by the candidate: Sept 2025 – Oct 2025
   Report Description: This report documents updates and enhancements made to the Homelab website to improve usability, content organization, and overall functionality in support of research, collaboration, and information dissemination. The changes were implemented to ensure the website more effectively communicates the Homelab's mission, resources, and ongoing projects to internal and external audiences. Overall, these website changes strengthen the Homelab's online presence by making information easier to locate, improving clarity for users, and providing a more organized and professional platform to support research activities and outreach efforts.
   Candidate's specific technical contribution: Vyshnevskyy independently led and implemented Phase 1 updates to the Homelab website to improve structure, navigation, and content organization. This work included designing and creating a new eighth page/tab, renaming and reorganizing existing tabs to better reflect Homelab activities, and aligning the site's overall information architecture with user expectations and institutional standards.Vyshnevskyy relocated all Homelab-related pages to reside consistently within the Homelab breadcrumb hierarchy, correcting prior placement under broader CACP and R&D navigation paths. This ensured clearer site ownership, improved discoverability, and a more intuitive navigation experience for users. Additionally, Vyshnevskyy updated the HomeLab dropdown menu to accurately reflect the revised eight-page structure, removed inactive or outdated pages, and clarified misleading links (such as renaming "Home" to "CACP Home" where appropriate). Pages associated with inactive studies were either deleted or removed from navigation while preserving relevant legacy content as needed.

Vyshnevskyy also reviewed and updated content across individual pages to improve clarity, consistency, and alignment with the Homelab's mission. These changes collectively enhanced usability, reduced confusion for site visitors, and strengthened the Homelab's online presence as a centralized and well-organized research resource.

3. **Name/Title for Key Delivered Technical Report: Hardware and Software Automated Request Form**
   Sponsor/to whom delivered: CACP – GA Tech
   Date range for work performed by the candidate: June 2025 – Sept 2025
   Report Description: The Hardware and Software Request Form is a professionally structured tool designed to streamline purchasing within the department. It provides researchers and staff with a standardized, school-approved template that aligns fully with Georgia Tech's procurement policies. By guiding users through key questions regarding technical specifications, purpose, and compliance requirements, the form ensures each request is accurately documented and meets institutional standards. Additionally, it enhances communication and coordination among the IT representative, administrative staff, and department director, ensuring all parties remain aligned and organized throughout the approval and purchasing process.
   Candidate's specific technical contributions: Vyshnevskyy identified a critical gap in the department's purchasing workflow, where communication occurred primarily through informal messaging and often resulted in misunderstandings about procurement requirements and vendor coordination. Drawing on technical expertise and familiarity with purchasing processes, Vyshnevskyy independently designed and implemented the Hardware and Software Request Form to create a more seamless and organized system. The form standardizes essential information, ensures alignment with Georgia Tech's procurement policies, and enhances communication among IT, administrative staff, and the department director. Through this initiative, Vyshnevskyy significantly improved clarity, reduced errors, and strengthened efficiency in managing hardware and software requests across the department.

4. **Name/Title for Key Delivered Technical Report: Continuity of Operations Plan and Data Validation**
   Sponsor/to whom delivered: CACP – GA Tech
   Date range for work performed by the candidate: May 2025 – July 2025
   Report Description: The Continuity of Operations Plan (COOP) ensures each unit can maintain or restore critical functions during disruptions, with a strong emphasis on technology resilience. This year's process was especially important due to added data validation, requiring units to confirm technology inventories, dependencies, criticality, and security measures. The validated information was then used to build a dependency map to support OEM in emergency and recovery operations. Units also completed key documents—including the After-Action Report, Improvement Plan Template, and Real-Life Event Description—to strengthen preparedness and overall Institute resiliency.
   Candidate's specific technical contributions: As Plan Manager, Vyshnevskyy led the department's COOP efforts by coordinating meetings with unit leadership and staff to review critical functions, technology dependencies, and updated security requirements. They collected, verified, and formalized all departmental data needed for this year's enhanced validation process, ensuring accuracy and compliance with Institute standards. Vyshnevskyy also completed and organized all required documentation—including the After-Action Report, Improvement Plan Template,

and Real-Life Event Description—for official submission. Their work ensured the department's COOP was thorough, compliant, and fully aligned with Georgia Tech's resiliency and technology continuity expectations.

5. **Name/Title for Key Delivered Technical Report: CACP Software Licenses**
   Sponsor/to whom delivered: CACP – GA Tech
   Date range for work performed by the candidate: Apr 2025 – June 2025
   Report description: Software licenses are obtained to ensure all systems operate securely, remain up to date, and comply with institutional IT requirements. These licenses provide authorized access to essential features, security patches, and manufacturer support. Vendor quotes are collected to document pricing, verify product specifications, and ensure compliant purchasing. This process helps the department make cost-effective, transparent decisions while acquiring reliable equipment that meets operational and research needs.
   Candidate's specific technical contributions: Vyshnevskyy identified upcoming license expirations for Asana, Tableau, MAXQDA, and MARK-10, and proactively contacted vendors to request updated quotes and renewal options. She prepared all procurement documentation, gathered pricing details, and ensured compliance with institutional purchasing requirements. She also handled the installation and configuration of the licensed software to maintain seamless access for researchers. These efforts directly supported the lab's data analysis and research activities by ensuring uninterrupted, secure, and fully supported software availability. In addition, Vyshnevskyy created a file that summarizes all licenses and upcoming expiration dates creating a more organized structure.

6. **Name/Title for Key Delivered Technical Report: IT Instructional Manual**
   Sponsor/to whom delivered: CACP – GA Tech
   Date range for work performed by the candidate: Oct 2024 – Nov 2024
   Report description: The IT instructional manual serves as a resource for CACP staff and faculty in providing step-by-step guidance on how to set up and use all hardware and software within the research lab. The manual includes instructions for using the TV, connecting to internet, the GlowForge, 3D printer, all computers, and the NVR system/cameras. All instructions are comprised in a binder and are at the faculty and staffs' discretion.
   Candidate's specific technical contributions: Vyshnevskyy composed the instructions for all the laboratory equipment in a detailed format and structured them into individualized portfolios. The instructions are written in simplified terms and language for easy, organized use amongst CACP employees.

7. **Name/Title for Key Delivered Technical Report: CACP IT Equipment Purchasing Process SOP**
   Sponsor/to whom delivered: CACP – GA Tech
   Date range for work performed by the candidate: Sept 2024 – Oct 2024
   Report description: The SOP applies to all faculty and staff within the Center of Advanced Communications Policy (CACP) involved in the acquisition of IT hardware, software, peripherals, and related services. All IT equipment purchases must be coordinated and executed through the College or designated Unit's IT group or the individual responsible for IT acquisitions in the unit.
   Candidate's specific technical contributions: Vyshnevskyy constructed a formal SOP for the department addressing all requirements for IT purchases, approved

vendors, overall step-by-step process for non-inventory surplus, asset tagging, and PCard transactions.

8. **Name/Title for Key Delivered Technical Report: IAC IT Purchasing Policy**
   Sponsor/to whom delivered: IAC – GA Tech
   Date range for work performed by the candidate: Aug 2024 – July 2024
   Report description: The Ivan Allen College of Liberal Arts Purchasing Policy provides the guiding principles for the procurement of IT related assets at the College and Unit level. The intent of this policy is to rationalize the acquisition of IT assets and minimize technology diversity with the goal to provide more reliable consistent IT support to faculty, researchers, and students.
   Candidate's specific technical contribution: Vyshnevskyy assisted and worked with IAC to compose a formal policy for the college addressing all requirements for IT purchases, assets, technology assembly, and services.

9. **Name/Title for Key Delivered Technical Report: CACP Facility Proposal**
   Sponsor/to whom delivered: CACP – GA Tech
   Date range for work performed by the candidate: March 2024 – April 2024
   Report description: The facility proposal is an outlined comprehensive summary of all the infrastructure, equipment, and resources within the research environment. It ensures the lab is designed and equipped with all the components to perform research objectives.
   Candidate's specific technical contributions: Vyshnevskyy independently designed the proposal for the lab, conducting a detailed assessment of technical structure and setup. Vyshnevskyy specified the hardware, software, and network infrastructure installed for the use of research capabilities.

III. OUTREACH AND SERVICE

A. Special Activities

1. Continuity of Operations Plan IT Manager – Manages department operations pertaining to IT and updates yearly COOP plans, **June 2025 – Current**

2. Supported with web development by providing QR codes and file hosting for the SuperGlue Event, **November 2024**

3. Interviewer with IAC IT department – Contribute to drafting and conducting interview questions for IT personnel and management, **July 2024 – December 2024**