



## **Southern Company Services Technology Organization Position Overviews:**

**Locations:** Hybrid - Birmingham, AL or Atlanta, GA

**Semesters:** Summer 2025

**Requirements:** Minimum of 3.0, current authorization to work in the United States.

**Majors:** Software Engineering, Computer Engineering, Computer Science, MIS, Cybersecurity, Data Analytics,

**Program Benefits:** Opportunity to work on a Capstone Project for the EVP & CIO of the Technology Organization, Leadership Chat with the EVP & CIO of the Technology Organization, Dedicated Mentor during the duration of the internship, Multiple networking opportunities with senior leaders, managers, former interns, and current interns, Community service opportunity

### **ASCEND**

#### **QA Testing:**

Southern Company is committed to building the future of energy for the customers who depend on us, the communities we serve and the industry we lead. The ASCEND program will transform how we do business, helping us elevate the customer experience, adapt to industry changes, and implement technology that offers new capabilities with more agility. It will involve implementing multiple applications, including the replacement of our meter data management (MDM) and customer service systems (CSS) with a new, Oracle customer information system (CIS) called customer to meter (C2M). Additionally, it includes implementing an advanced analytics platform (AAP), customer experience (CX) and customer engagement platform (CEP). The new platform, to be rolled out to Alabama Power, Georgia Power and Mississippi Power, will be implemented in phases over the next two years.

In this internship, you will:

- Document/create manual test cases in Jira for E2E, UAT, ORT and parallel testing
- Execute manual test cases by following test steps and documenting results and evidence along the way
- Partner with Automation testers to provide functional and technical knowledge on what needs to be automated
- Work closely with Developers, System Support Analysts, and Business Process Leads to identify, track, and resolve defects
- Retest failed test cases once bugs/defects are resolved
- Assist with the tracking of key testing metrics and reviews to ensure consistent progress
- Report status on test scripts execution/progress to Test Coordinators, Test Managers and Test Leads

**Requirements:** Strong knowledge or ability to learn JIRA and how to setup test cases, test executions and linkage to JIRA features and requirements. Ability to build strong relationships within the testing workstream and across the various ASCEND workstreams. Understand test design elements to ensure they meet business needs and create efficiencies. High degree of initiative and personal ownership. Excellent problem-solving and analytical skills. Interpersonal skills and the ability to communicate effectively. Excellent organizational skills and strong attention to detail. Openness to change. Knowledge and/or experience with software testing processes, tools and techniques. Strong analytical, problem solving and critical thinking skills.

### **QA Testing Liaison:**

The ASCEND team is looking for highly qualified interns to assist with Quality Assurance Testing in summer 2025 as they implement multiple application releases. Their responsibilities will be to understand the process below and engage in various steps, liaising between teams and team members, helping to communicate status and/or record results. There will be the opportunity to dive deeper into any of these activities based on skills, aptitude, and interests:

#### **1. Planning:**

- **Define Objectives:** Establish clear goals for what the testing aims to achieve.
- **Create Test Plan:** Develop a detailed plan outlining the scope, approach, resources, and schedule for testing activities.

#### **2. Preparation:**

- **Set Up Environment:** Prepare the testing environment, including data refresh, data staging/ sub-setting, and ID readiness.
- **Develop Test Cases:** Create specific test cases based on requirements and design documents.

#### **3. Execution:**

- **Run Tests:** Execute the test cases, including functional, integration, system, and user acceptance testing.
- **Record Results:** Document the outcomes of each test case, noting any defects or issues encountered.

#### **4. Defect Management:**

- **Identify Defects:** Log any defects found during testing.
- **Prioritize and Fix:** Prioritize defects based on severity and impact, and work on fixing them.

#### **5. Validation:**

- **Re-test:** Conduct re-testing to ensure defects have been resolved.
- **Regression Testing:** Perform regression testing to confirm that new changes haven't introduced new issues.

#### **6. Reporting:**

- **Generate Reports:** Compile test results and defect reports.
- **Review and Sign-off:** Review the reports with stakeholders and obtain sign-off to proceed to the next phase.

## 7. Deployment:

- **Final Validation:** Conduct final validation in the production environment.
- **Go-Live:** Deploy the system to production.

## Technology Security (Cyber Security):

Within TO, the Technology Security organization's core objective is to ensure a secure and reliable environment for the consumers of our services, both internally and externally. Protecting the confidentiality, integrity and availability of our assets ensures the continuation for Southern Company and its affiliates to move, make and sell electricity. Our complex environment generates a constant stream of opportunities which require continual innovation with an evolving set of technologies.

### Identity Security:

The Identity Security team is responsible for architecture, infrastructure operations, and provisioning of digital identities throughout the Southern Company technology ecosystem. The team manages a long list of identity products including on-prem and cloud identity providers, multi-factor authentication agents, privileged access management, public key infrastructure, and mainframe security including responsibility for the service management flows associated with these products and the provisioning of non-human accounts and supplemental workers.

**Requirements:** Candidate should have an interest in cybersecurity – specifically in Identity and Access Management – and a strong desire to work in an arena of electric and gas critical infrastructure. Beneficial skills for the role include an understanding of human and non-human identities, automation/development capabilities, network and server operations, and an understanding of modern, evolving security risks. Softer skills relevant to success include the ability to coordinate with others, solid written and verbal communication, ability to self-start and prioritize, and a positive demeanor.

### Advanced Threats & Intelligence:

In the Advanced Threats and Intelligence Department, the team identifies and tracks sophisticated risks to our company's people, systems, and information. First, the team focuses on understanding and sharing the latest information about cyber threats that target the energy sector and Southern Company. This is done through automated systems, knowledge management, partnerships, and analysis. Second, the team builds and staffs the Insider Threat Fusion Center, which tracks risks introduced by employees, contractors, and vendors operating in our facilities and on our networks. Operating at the intersection of advanced technology and human analysis, our mission is to stay ahead of the most persistent and well-resourced cyber threats Southern Company faces.

**Requirements:** Interested in cyber threat actors and the latest techniques, tactics, and procedures, Interested in analysis of threats in a less structured or research environment, Technical skills:

scripting/coding, technical analysis of malware, Splunk, technical writing/documentation, Soft skills: problem solving, creativity, adaptability, teamwork

### **Nuclear Cyber Security:**

The IT Nuclear Cyber Security Analyst is responsible for developing, maintaining and monitoring an effective Information Security program which is designed to ensure the logical and physical protection of Southern Nuclear's Critical Digital Assets. Areas of concentration include: Firewalls, Intrusion Detection/Prevention, Encryption, Antivirus, Incident Response, Security Event Management.

**Requirements:** Interns need to express interest in: Nuclear Power, Industrial Control Systems, Compliance and Risk Management, Network Security (Firewalls, Intrusion Detection Systems, Data Diodes, Security Event Management, Antivirus). Technical Skills include: Windows and Linux/Unix Server Admin experience, Basic networking skills (TCP/IP, subnet masking, routing), Scripting experience (i.e., Python, Bash, PowerShell), Experience with virtualization software, Familiarity with logging technologies (i.e., Splunk)

### **Threat Analysis – Security Operations Center:**

A Southern Company Security Analyst participates in monitoring, hunting, and responding to cyber security events. He/She/They provide(s) a front-line role during cyber security incidents, identifying the extent of the threat, business impacts and advising or sometimes performing the most suitable course of action to contain, eradicate and remediate an incident. A Southern Company Security Analyst maintains a good knowledge of the threat landscape, helps enhance visibility and response capabilities by identifying new methods of detecting threats. A Southern Company Security Analyst is proactive and seeks out adversaries determined to negatively impact Southern Companies reputation, financial interest or threatens the safety of our employees and customers.

**Requirements:** Areas of interest - Security operations; including monitoring, analysis, and response. Technical skills required: Understanding of networking protocols, Some familiarity with security tools, Ability to analyze logs from various sources including network, email, cloud, and endpoint

### **Digital Workplace Solutions:**

Digital Workplace Solutions (DWS) provides secure, reliable, and effective technology leadership, solutions, and services that support today's and tomorrow's business needs. DWS does this by providing applications, hardware, and services to the enterprise that enable employees to do their jobs efficiently and effectively. As such DWS is responsible for the engineering, architecture, and support of the end-user environment.

### **Digital Workplace Solutions – Workplace Software Asset Management:**

Digital Workplace Solutions (DWS) provides secure, reliable, and effective technology leadership, solutions, and services that support today's and tomorrow's business needs. DWS does this by providing applications, hardware, and services to the enterprise that enable employees to do their jobs efficiently

and effectively. As such DWS is responsible for the engineering, architecture, and support of the end-user environment.

As part of Digital Workplace Solutions, the Workplace Software Asset Management team offers desktop software solutions, guidance on software requests, procurement, installation and decommission. Additionally, this team provides education, best practices and internal assessments of software licenses. We are seeking a highly motivated, detail-oriented intern to join our team and assist with our Desktop and Software Asset Management lifecycle management initiatives. In this role, you will be responsible for supporting efforts related to desktop and software asset lifecycle management.

**Requirements:** Facilitate meetings. Strong written and verbal communication skills. Organizational skills and attention to detail. Ability to work with a diverse team and independently. Process improvement mindset. Capacity to learn and apply new technologies. Diagnostic, troubleshooting, analysis, and problem-solving skills

### **Application Development Strategies & Standards – Developer Analyst:**

Application Development Strategies & Standards area is seeking a highly motivated and talented individual to intern in the organization. The intern will work with a team of highly technical professionals on our application design and development projects, observing and learning application development projects are architected, planned, researched, and executed and will include hands on experience working closely with experience Senior developers and solution architects.

**Requirements:** Basic knowledge of computer hardware and networking with an interest in data analytics, Positive attitude, Experience in or ability to quickly learn the following skills: Programming: Python, C#, Web Stack, Java, C++, Software: Office 365, Power BI, Generative AI, MS Azure, Databricks and like programs, Technology: AI, video analytics, ML/AI Ops

### **Business Excellence – Risk & Compliance:**

Risk and Compliance organization is seeking a highly motivated and talented individual to intern in the organization. The intern will work with a team of highly technical professionals on our Risk and Compliance projects, observing and learning how risk and compliance projects are architected, planned, researched, and executed and will include hands on experience working closely with experience risk compliance analysts.

**Requirements:** Basic knowledge of computer hardware and networking with an interest in data analytics, Positive attitude, Experience in or ability to quickly learn the following skills: Programming: Python, C#, Web Stack, Software: Office 365, Power BI, Generative AI, MS Azure, Databricks and like programs, Technology: AI, video analytics, ML/AI Ops

### **Technology Strategy & Program Delivery:**

Join our Technology Strategy and Program Delivery team as an Intern and immerse yourself in the heart of project management and operational excellence. In this role, you will gain hands-on experience with Broadcom Clarity for project and portfolio management, delve into the nuances of our defect ticketing triage process, and contribute to the creation and analysis of critical reports. You will also explore the realms of data analytics, assisting in interpreting data to drive project decisions. Additionally, you will play a role in the onboarding process for new projects and team members and get a chance to apply various project management methodologies. This internship is an opportunity to be part of a team that values innovation and efficiency, offering a comprehensive insight into the dynamic world of PMO operations.

### **Job Responsibilities and Professional Development Opportunities:**

- Assist in the development and maintenance of project management deliverables, learning from a team of experienced project managers.
- **Contribute to Team Coordination and Communication:** Support in providing work direction and communication facilitation for project teams as part of the learning process.
- **Assist in Project Change Control and Reporting:** Help manage project change control processes and contribute to status reporting and project estimating under guidance.
- **Support in Change Management Processes:** Aid in facilitating the change management process for PMO program and project management processes and deliverables.
- **Contribute to Project Portfolio Management Enhancement:** Assist with the advancement of project portfolio management, focusing on process and tool enhancements.
- **Liase with PMO Stakeholders:** Interface with project managers (PMs), portfolio delivery managers (PDMs), and project stakeholders to learn and provide support.
- **Project Information Analysis and Communication:** Collect and analyze project information to assist in determining project status, following up on project issues, and communicating findings to the project manager.
- **Support in Risk Management:** Assist in document risk responses by communicating with project members and assisting in updating plans and addressing risk items.

**Requirements:** Prior experience in technology projects or academic projects, Basic understanding of PMI-based project management principles and methodologies, familiarity with program and project delivery, and project management lifecycle, Analytical skills to assist in managing project activities, including cost tracking and project monitoring, Ability to manage multiple tasks and contribute to project deliverables effectively, Effective communication skills, both oral and written, with the ability to interact professionally, Technical Proficiency: Familiarity with Microsoft Office Suite, especially Teams, Excel, PowerPoint, and Word. Exposure to project management software like Microsoft Project and Clarity PPM is beneficial. Basic understanding of SharePoint and TEAMS administration is a plus. Interest in learning about Business Intelligence reporting tools such as TEAMS/SharePoint, Excel, PowerPivot, PowerBI.

### **Infrastructure Services:**

#### **Infrastructure Operations:**

This internship will teach and prepare a student to become a Telecom Field Operations technician. The Telecom Field Operations Technician is responsible for the installation, maintenance (both reactive and preventive) and project support of the Southern Company's voice, data, and telecommunications transport

networks. These networks include digital microwave, fiber optics, LANs (local area networks), and voice and data wireless systems. These systems are installed, maintained, and repaired in accordance with established standards, service levels, operational processes, and applicable work agreements. Interns will have the opportunity to work closely with other Field Ops Techs on all the listed telecommunications media and equipment. This is a hands-on internship in the field requiring daily driving, at no cost to the intern, from site to site or where the work is on any given day. Time for “in the office” work/at a desk will be given for administrative tasks including Capstone Project work, internship calls/meetings, etc.

The Intern will work alongside senior Field Operations Technicians and Analysts to learn or expand skills and knowledge of telecommunications. Each day is different. Bring an open mind that’s willing to learn each day. Below is some of what is required of a Field Ops Technician. By the end of the internship, the intern will be able to perform some of these tasks solo and will have experienced each of these in the day-to-day:

- Responsible for the installation, maintenance (both reactive and preventive) and project support on the Southern Company's data and telecommunications transport networks.
- Responsible for participating in 24x7 on-call procedures/operations.
- Responsible for interfacing with and coordination of contractors and/or vendors associated with the Field Operations function as appropriate.
- Responsible for interfacing with the internal business partners, vendors, contractors, and other Technology Organization groups related to problems and installations as appropriate.
- Responsible for understanding and adhering to billing and performance processes and procedures.
- Responsible for maintaining accurate circuit and equipment inventories and documentation of assigned sites.
- Responsible for installing standard, endorsed, or certified off the shelf software and/or hardware devices.

**Requirements:** Understanding of the various topologies, e.g. telecommunications (microwave and/or fiber), wireless, data and voice networks and how they interface with each other. Ability to logically troubleshoot and repair hardware and software associated with personal computers, peripheral devices, voice systems, data networks, telecommunications (microwave and/or fiber) systems and ancillary equipment (e.g., alarm systems, DC systems). Working knowledge of radio communication systems and an FCC or equivalent license for radio repair. Knowledge of voice and data wireless systems and troubleshooting techniques. Knowledge of PC hardware, operating systems, and associated peripheral and software components.

### **Telecom Engineering Support:**

Telecom Services is responsible for system level support of Southern Company telecommunications transport systems and infrastructure. This includes support of the Company’s RF systems to include AMI (Advanced Metering Infrastructure), point-to-point microwave, as well as GPON (Gigabit Passive Optical Network), DWDM (Dense Wavelength-Division Multiplexing), SEL ICON, and Nokia SARS Next Gen Telecom systems from both a 24x7 operations and project implementation perspective.

In this internship, you will:

- Responsible for strategic and tactical plans and engineering designs for all telecom network facilities including digital microwave- packet, fiber optics, WAN and data communications equipment, ancillary systems, and leased telecommunications services.
- Responsible for development and compliance of engineering standards including documentation, product, lifecycle plans, and design packages.
- Responsible for providing support to other Southern Company Operating Companies and/or Partners on issues related to transport network planning, engineering design, and engineering consulting.

**Requirements:** Ability to analyze information from multiple sources for complex problem resolution. Ability to organize tasks and coordinate various employees, vendor / contractors, and customers / partners to meet project goals. Ability to work independently, prioritizing major tasks by overall impact to the company. Ability to effectively utilize standard Company computing applications (i.e. Visio, Outlook, Word, Excel, etc.)

**We offer a competitive compensation package and relocation. Southern Company is an equal opportunity employer where an applicant's qualifications are considered without regard to race, color, religion, sex, national origin, age, disability, veteran status, genetic information, sexual orientation, gender identity or expression, or any other basis prohibited by law.**