

Application Development Intern

Career Interest: Computer/IT Support, Coding, Software & Application Development, Webpage

- Learn an overview of SDLC (software development life cycle) processes, waterfall and agile.
- Job shadow the various roles on the development team (System Analyst, Data Analyst, Developer, Quality Assurance) to introduce the tasks and responsibilities of each role.
- Report, through a development project, the progress of Governed Project development efforts within the ITCS organization.
- Develop BI (Business Intelligence) reporting with Microsoft PowerBI and ETL (Extract Transform and Load) of data with tools like SSIS (SQL Server Integration Services), Power Query, and Excel.
- Assist in creating and modifying general computer applications or specialized programs.
- Assist in gathering user needs to develop software solutions and maintain those programs.
- Assist in maintaining software applications or websites using core coding languages and tools.
- Assist in coordinating with developers to identify the goals, limits, required capabilities, performance requirements, and users for a given project.
- Assist in modifying existing software to correct errors, adapt it to new hardware, or improve its performance. Write, design, or edit web page content.
- Work with others to complete work, hit milestones or targets, and resolve conflicts.

Electrician Intern

Career Interest: Electrical Engineering, Electrician, Construction

- Learn and understand the basics of the National Electrical Code.
- Understand and follow the electric safety guidelines.
- Learn blueprint reading and design.
- Learn and perform Branch circuit lighting and power installation and finishes.
- Troubleshoot and resolve electrical circuit issues.
- Increase electrical circuit efficiency through mathematical calculations by measuring input and output levels.
- Perform basic electrician activities while demonstrating proper care of tools, equipment, and materials.
- Perform progressively more difficult roles under the supervision of an electrician.
- Learn the name types and use of tools, equipment, technology applications and materials.
- Make sure that work stations are cleaned at all times.
- Assist in wire pulls.
- Learn and perform fixture installation.
- Learn and perform the basics of conduit bending up to 1".
- Learn, perform, and understand Prefabrication.
- Assist with other duties assigned.

CNC Machinist Intern

Career Interest: Machining / Manufacturing / Quality Control

- Assist in planning machining by studying work orders, blueprints, engineering plans, materials, specifications, orthographic drawings, reference planes, locations of surfaces, and machining parameters; interpreting geometric dimensions and tolerances (GD&T).
- Assist in programming mills and lathes by entering instructions, including zero and reference points; setting tool registers, offsets, compensation, and conditional switches; calculating requirements, including basic math, geometry, and trigonometry; proving part programs.
- Assist in loading feed mechanism by lifting stock into position.
- Assist in verifying settings by measuring positions, first-run part, and sample workpieces, adhering to international standards.
- Assist in maintaining safe operations by adhering to safety procedures and regulations.
- Assist in maintaining equipment by completing preventive maintenance requirements, following manufacturer's instructions, troubleshooting malfunctions, calling for repairs.
- Take an active interest in learning the job by participating in educational opportunities and learning from peers.

Computer-Aided Automotive Technician Intern

Career Interest: Auto Maintenance, Mechanical or Electrical Engineering

- Work with automobile manufacturers to learn technology components on vehicles and how different components interact with each other.
- Program software to ensure vehicle safety, reliability, and useability.
- Configure navigation systems and train end-users how to operate the computer-aid features in vehicles.
- Use advanced automotive software to diagnose mechanical problems and communicate issues/fixes to mechanics so they can perform repairs.
- Learn the computerized/electronic components of multiple automobiles both US and foreign models.
- Troubleshoot, test, and resolve computer and electronic issues in vehicles.
- Assist customers on how to use technology in their vehicles.
- Install, maintain, troubleshoot, and repair electrical components using digitized technology.
- Use software tracking system for issue reporting and resolution tracking.
- Understand technical wiring and electrical circuits required to operate vehicles.
- Interpret scan data using computer diagnostics and communicate issues/repairs with customers for approval so mechanics can repair the non-computerized issues.
- Assess vehicle road readiness using software scanning tools.
- Perform safety inspections using mobile applications.
- Assist in performing vehicle routine maintenance like oil changes, tire rotations, brake repairs, starters, etc. to better understand how all equipment in a vehicle interact together (less than 20% of time).
- Learn ISO standards and relevant industry-specific standards (e.g., OSHA).
- Use Repair Shop Management software to track work completed, inventory of supplies, and costs.

Data Mining/Data Analysis Intern

Preferred Interest: Computer/IT Support, Data Analysis

- Gather and research data to assist in decision-making.
- Contacting data research for the purpose of creating a database
- Perform database mining in internal/external database systems
- Excel Spreadsheet experience helpful
- Assist in creating playbooks and user training guides.
- Research and document transformation strategy best practices.
- Assist in creating requirements for the System Analyst Reporting needs.
- Create queries and dashboards as requested.
- Create documentation around the Requirement Analysis.
- Work with analyst to document design and recommendations..
- Build organizational documentation on data capturing processes and procedures.
- Assist in database management and entry.
- Assist in other organization IT needs.

Database Intern

Career Interest: Database/IT

- Migrate data and set up file folder structures
- Evaluate data management applications and make recommendations on which application will best meet defined needs
- Assist in identifying, answering, and resolving questions and concerns utilizing on-line knowledge base and computer system information
- Interact with professionals in a professional, courteous manner both verbally and in writing
- Assist in answering customer questions and resolving problems
- Conduct research on database entry and systems
- Input new data and verify existing data in the database system
- Contribute to the development and completion of projects that vary in size and complexity
- Assist in organizing, documenting, and performing daily business activities under the direction of a manager
- Assist in tracking the progress and quality of project work
- Use complex phone systems, Microsoft Office products, social media platforms, email, and other software and hardware systems for daily business activities assigned by manager
- Use scheduling tools to monitor projects plans, work hours, budgets, and expenditures
- Keep manager informed about project status and issues that may impact client relations

Digital Graphic Design Intern

Career Interest: Digital Design/Graphic Design

- Assist in design, publish, manage/maintain content and layout for website and all digital properties.

- Coordinate and implement content updates for digital media.
- Work with others to complete work, hit milestones or targets, and resolve conflicts.
- An integral member of a project team who contributes to the development and completion of projects that vary in size and complexity.
- Assist in organizing, documenting, and performing daily business activities.
- Use complex phone systems, Microsoft Office products, social media platforms, email, and other software and hardware systems for daily business activities assigned by the manager.
- Perform any further job-related instructions as requested.
- Work directly with teams to establish and maintain customer relations.
- Assist in coordinating and implementing content updates for the website.
- Assist in answering customer questions and resolving problems.
- Input new data and verify existing data.

Digital Printing and Design Intern

Career Interest: Digital design, CNC operator, or Printing Technology

- Program software to control the operation of manufacturing machines
- Create visual concepts using digital design images
- Design, develop, and produce creative content to meet customer's specifications
- Use CNC machines to produce digital printing per customer work orders
- Troubleshoot and repair printing equipment including electric components
- Learning the different printing processes and what they consist of
- Straighten, clean, polish and/or assemble parts during the hand bindery process
- Assist in makeready processes of offset and digital printing
- Assist in loading paper
- Assist in programming cutter and cutting jobs
- Assist in setting the folders up and running the job
- Assist in applying film lamination to different substrates
- Assist in planning by studying work orders, materials and specifications
- Assist in loading feed mechanism by lifting stock into position.
- Maintain safe operations by adhering to safety procedures and regulations.
- Assist in maintaining equipment by completing preventive maintenance requirements, following manufacturer's instructions, troubleshooting malfunctions, calling for repairs.
- Take an active interest in learning the job by participating in educational opportunities and learning from peers.

Electronic Technician and Processor Intern

Career Interest: Electronics / Manufacturing / Engineering / IT

- Setup and perform technical electronic test functions with aide of written procedures and instructions.
- Use of schematics, PCB/PWB layouts, mechanical drawings, and work instructions.
- Assist in troubleshooting, repairing, and testing electronic circuit cards

- Use oscilloscopes, digital multi-meters, network analyzers, spectrum analyzers and automated tests sets.
- Responsibilities will be limited until intern is properly trained with OSHA.
- Use computer to enter product details and pictures into software.
- Perform product handling in a warehouse environment.
- Clean, photograph, test, and ship products.
- Establishes and maintains effective team relationships.
- Use small hand tools such as tweezers, exacto-knives and pliers to make adjustments to the cards
- Assist in soldering various electronic components, wires and other electronic parts
- Assist in assembling microcircuits requiring fine hand assembly with the use of microscopes
- Assist in maintaining safe operations by adhering to safety procedures and regulations.
- Assist in maintaining equipment by completing preventive maintenance requirements, following manufacturer's instructions, and troubleshooting malfunctions.
- Take an active interest in learning the job by participating in educational opportunities and learning from peers.
- Maintain safe operations by adhering to safety procedures and regulations.

Helpdesk/Network/IT Field Specialist Intern

Career Interest: Computer Support / Programming

- Assist in setting up IT equipment for employee use, performing or ensuring proper installation of PCs, cables, operating systems, and associated software
- Assist in providing technical assistance to computer users, answering questions or resolving computer problems for clients in person, over the phone, or digitally
- Assist in observing system functioning to verify correct operations and detect errors
- Work with others to complete work, hit milestones or targets, and resolve conflicts
- Record events and problems and their resolution in logs
- Follow-up and update customer status and information
- Walk the customer through problem-solving processes
- Assist in oversight of all technology operations (e.g. network security, network devices, etc.) and evaluate them according to established goals.
- Enforce IT policies and systems to support the current and future company environment.
- Work with physical access control security system, create/edit/enable/disable cardholder fob with appropriate access per guidelines.
- Assist in reviewing the business requirements of all departments to support their technology needs.
- Assist in recommending purchase of efficient and cost-effective technological equipment and software as needed.
- Assist in inspecting the use of network and user device equipment and software to ensure functionality and efficiency.
- Assist identifying the need for upgrades, configurations, or new systems.

- Assist in Help Desk task resolution in support of user community based on a priority/triage system.
- Assist in developing any missing documentation of systems and network functionality.
- Performs other duties as assigned.

~~HVAC Electronic Install/Repair Intern~~

~~Career Interest: Heating and Air Installation and Maintenance~~

- ~~Setup and perform technical electronic test functions with aid of written procedures and instructions.~~
- ~~Perform basic electrician activities while demonstrating proper care of tools, equipment, and materials.~~
- ~~Perform basic HVAC installation support activities (after having been shown all safety related aspects of the role and the expected standards) e.g. fabricates simple fiberglass and sheet metal ducts and transitions, install sheet metal and fiberglass components, hangs registers and grilles, stocks parts, installs refrigeration line sets including soldering and brazing, installs power and control wiring, assists installers and Technicians.~~
- ~~Learn and perform Branch circuit lighting and power installation and finishes.~~
- ~~Learn and understand the basics of the National Electrical Code.~~
- ~~Understand and follow the electric safety guidelines.~~
- ~~Perform progressively more difficult roles under the supervision of an Installer or Technician; e.g. measures and threads piping, uses basic test equipment, assist in start up/change/test/balance, performs home rough ins, installs residential units (gas, oil, electric furnaces, air conditioners, and heat pumps).~~
- ~~Help construct foundations of concrete or other noncombustible material.~~
- ~~Help assemble and position heating units in accordance with diagrams.~~
- ~~Help install air ducts, smoke pipes, blowers and stokers, and fuel pipes, assist with cutting holes in floors and wall to form air duct outlets.~~
- ~~Help wrap insulating asbestos around air ducts, help connect and adjust timers and thermostats.~~
- ~~Assist inspections of inoperative heating units to locate causes of trouble.~~
- ~~Help disassemble heating units and replace or repair defective parts.~~
- ~~Assist with cutting, bending and crimping sheet metal to repair furnace, stove casing, and pipes.~~
- ~~Help inspect and measure building to determine airflow requirements, help plan and draw layout and dimensions of ductwork.~~
- ~~Assist with obtaining price quotations on materials and purchases materials such as sheet metal, compressors, and fans from suppliers and tests equipment to verify that equipment is functioning.~~
- ~~Schedule air conditioning installation assignments.~~
- ~~Assist installation of air conditioning systems.~~
- ~~Other duties may be assigned.~~

IT/Cyber Intern

Career Interest: Computer/IT Support, Cyber Security/Cyber Defense

- Shadow Cyber Team Members and learn in the following areas: Endpoint Protection – Servers, Mobile Devices, Laptops; Data Loss Prevention – Secure Web Gateway, Cloud Access Security Broker, Data Discovery and Detection, Email Gateway; Perimeter Controls – Firewalls; Attack Surface Reduction – Malware, Anti-Virus; Identity and Access Management – Single Sign On, Multi-Factor Authentication; Governance – Security Committee Meetings, Risk Oversight; Visibility – Logging, Monitoring, Metrics and Reporting; Automation – Script Writing and Execution; Incident Response – Identification, Triage, Investigate, Action; Vulnerability Management – Identification, Triage, Investigate, Action; and Threat Intelligence – OSINT investigation, report writing, indicator research.
- Assist in identifying and solving potential and actual security problems.
- Assist in database management and entry.
- Assist in providing technical assistance to computer users, answering questions or resolving computer problems for clients in person, over the phone, or digitally.
- Assist in observing system functioning to verify correct operations and detect errors.
- Recognize problems by identifying abnormalities; reporting violations.
- Record events and problems and their resolution in logs.
- Help to maintain system security controls.
- Assess security violations and inefficiencies and help to solve potential and actual security problems.

IT and Application Support Intern

Career Interest: Computer/IT Support, Database Management

- Assist in database design, management, and entry.
- Assist in providing technical assistance to computer users, answering questions or resolving computer problems for clients in person, over the phone, or digitally.
- Assist in observing system functioning to verify correct operations and detect errors.
- Research best practice in database applications.
- Record events and problems and their resolution in logs.
- Assist with computer inventories and documentation.
- Assist with computer software updates.
- Assist with Google form data analysis.
- Assist in identifying and solving potential and actual security problems.

IT / Data Analyst Intern

Career Interest: Computer/IT Support, Database Management

- Gather and research data to assist in decision-making.
- Research and document Agile best practices.
- Assist in creating playbooks and user training guides.
- Research and document transformation strategy best practices.
- Assist in creating requirements for the System Analyst Reporting needs.

- Create queries and dashboards as requested.
- Create documentation around the Requirement Analysis.
- Work with analyst to document design and recommendations.
- Work with organization Technical Support to assist with organizational IT support requirements.
- Conduct research on best practice in organizational IT processes and procedures.
- Build organizational documentation on IT processes and procedures.
- Assist in database management and entry.
- Assist in other organization IT needs.

Junior Coder Intern

Career Interest: Computer/Software Programming, Engineering, Application Development

- Assist in creating and modifying general computer applications or specialized programs
- Assist in gathering user needs to develop software solutions and maintain those programs
- Assist in maintaining software applications or websites using core coding languages and tools
- Assist in coordinating with developers to identify the goals, limits, required capabilities, performance requirements, and users for a given project
- Assist in modifying existing software to correct errors, adapt it to new hardware, or improve its performance. Write, design, or edit web page content
- Work with others to complete work, hit milestones or targets, and resolve conflicts

Software QA Tester Intern

Career Interest: Computer/Software Programming, Engineering, Application Development

- Assist in executing testing efforts of software, which include documentation, reporting, analysis, and final product acceptance
- Assist in ensuring applications and platforms can communicate with each other as required
- Assist in testing software with scripts
- Assist in logging and tracking defects found during testing
- Assist with integration, regression, and various other testings
- Assist in identifying and recommending changes to increase the effectiveness and quality of software
- Assist in communicating with software users to address system bugs
- Work with others to complete work, hit milestones or targets, and resolve conflicts

Systems Analyst Intern

Career Interest: Computer/Software Programming, Engineering, Application Development, Marketing

- Work with organization Technical Support to assist with organizational IT support requirements.
- Conduct research on best practice in organizational IT processes and procedures.
- Build organizational documentation on IT processes and procedures.

- Assist with deploying, testing, maintaining, and troubleshooting core business applications, including application servers, associated hardware, endpoints, and databases.
- Assist in database management and entry.
- Assist in website management and modifications.
- Build manual regarding operations of database for future users.
- Assist in other organization IT needs.
- Research best practice in cyber security and share results with organization.
- Assist with computer inventories and documentation.
- Assist with computer software updates.
- Assist with Google form data analysis.
- Assist with Social Media and website analytics.

Web Design and Digital Marketing Intern

Career Interest: Web Design, Digital Marketing, Business or Computer related fields

- Assist in maintaining website and implementing content enhancements
- Use Google Analytics to adjust existing and create new electronic marketing materials to increase company's name recognition
- Assist in gathering data and analyzing user trends to identify and develop effective marketing strategies
- Assist in designing, publishing, managing/maintaining content and layout for marketing website and all digital properties
- Coordinate and implement content updates for digital media including social media
- Work with others to complete work, hit milestones or targets, and resolve conflicts
- An integral member of a project team who contributes to the development and completion of projects that vary in size and complexity
- Assist in organizing, documenting, and performing daily business activities
- Use complex phone systems, Microsoft Office products, social media platforms, email, and other software and hardware systems for day-to-day business activities assigned by the manager
- Perform any further job-related instructions as requested
- Work directly with sales teams to establish and maintain customer relations
- Assist in answering customer questions and resolving problems
- Input new data and verify existing data

High School Tech Internship Program Guidelines

Overview:

The High School Tech Internship program reimburses Ohio employers for hosting high school interns in technology-focused roles. The goal of the High School Tech Internship program is to provide businesses with the tech talent they need while also providing students with valuable work experience at an early age. Interns will be expected to perform job duties similar to what is expected of an entry-level employee in technology roles that focus on software development, data, cloud and IT infrastructure, cybersecurity, broadband/5G, advanced mobility, and other in-demand technology-focused roles.

Intermediaries:

Six organizations will serve as intermediaries to facilitate the High School Tech Internship program. These organizations will serve as a resource for employers, schools, and students as they participate in the program. They will work to recruit, interview, and place interns – and submit all the needed paperwork to apply for the program and to submit closeout paperwork for reimbursement. Intermediaries may also serve as the employer of record. Additionally, intermediaries will provide supportive services throughout the duration of the internship to resolve any issues that arise.

The intermediary will also facilitate the creation of work-based learning agreements between employers and students. Each organization will serve as the single point of communication to allow the intermediary to provide participants with any assistance that they may need throughout the entirety of the internship process. Interested employers and students should reach out to their regional intermediary to participate and apply to the program.

2024 High School Tech Internship Intermediaries:

Region	Intermediary
Southeast	Building Bridges to Careers
Northeast	Youth Opportunities Unlimited (Y.O.U.)
Northwest	Junior Achievement of Northwestern Ohio
West	Strategic Ohio Council for Higher Education (SOCHE)
Southwest	INTERalliance of Greater Cincinnati
Central	Educational Service Center of Central Ohio

Program Timeline:

- Internships are eligible to be completed between January 2, 2024 and September 30, 2024.
- Internship placements must be finalized and applied for through a regional intermediary by June 14, 2024.
- Employers will work with their regional intermediary to submit reimbursement documentation to the Ohio Department of Development by October 31, 2024.

Application:

- Interested employers and students will apply for the program through their regional intermediary organization before the deadline of June 14, 2024.
- Interested students or schools assisting students should reach out to their regional intermediary for assistance applying.
- Employers will be required to submit information such as Employer Name, Employer Address, intern hourly wage, and other information which may be requested by the Ohio Department of Development for the application.

Eligible Employers:

- Private Businesses in Ohio
- Non-Profit Entities in Ohio
- Educational Entities (District, Career-Technical Planning District, Educational Service Center, Higher Education Institutions) in Ohio
- Local and County Governments in Ohio

Eligible Students:

- Ohio high school students who will be 19 years of age or younger on the start date of their internship.
- Students graduating in the Spring of 2024 are eligible.

Eligible Roles:

- Interns will be expected to perform job duties similar to what is expected in an entry-level role.
- Roles focusing on software development, data, cloud and IT infrastructure, cybersecurity, broadband/5G, advanced mobility, and other in-demand technology-focused roles are eligible.

Wage Reimbursement:

- To qualify for wage reimbursement, employers must submit supporting documentation to their regional intermediary after the conclusion of the internship, proving the student was employed for a minimum of 120 hours and was paid at least \$12 per hour as a W2 employee.
- Supporting documentation (such as a payroll report, pay stub, timesheet, etc.) is required to show the business name, intern name, hours worked, dates, and amount paid (gross and net).
- Wage reimbursement will occur at a two-thirds rate if an intern is documented to work at minimum 120 hours, but less than 200 hours.
- If an intern works 200 or more hours, the business will be eligible for wages to be fully reimbursed. The maximum reimbursement is \$5,000 per student.

Credential Attainment Incentive:

- Employers may receive an additional \$1,000 per intern if they demonstrate the intern has earned an industry-recognized credential recognized on the [Innovative Workforce Incentive Program](#) (IWIP) list by the time of the reimbursement request.
- Participating schools may be eligible to use qualifying credentials earned during internships to get \$1,250 payments, per credential, through the Innovative Workforce Incentive Program (IWIP).

Questions?

Any program questions may be directed to:

High_School_Tech_Internship@Development.Ohio.Gov