Kyle Young

kyleyoung.dev | kyle@kyleyoung.dev | linkedin.com/in/kyle--young | github.com/k-yleyoung

EDUCATION

University of Missouri, B.S. Computer Science May 2026

Coursework: Data Structures & Algorithms, Operating Systems, Theory of Computation, Database Systems, Computer Security, Object-Oriented Software Design

PROJECTS

Gimme | Autonomous Golf Practice Robot (Python, Swift, Isaac Sim, Embedded Linux) In Development

- Built Python and Swift software for camera-guided ball detection, tracking, and retrieval planning, tying iPhone-based perception to the robot's embedded control architecture.
- Wrote Python simulation and collision-checking workflows that evaluated 2,989 arm and camera-mount poses for reachability, interference, and pickup feasibility, and used the failures to change the design before building hardware.
- Designed the control stack around a Luckfox Pico Plus embedded Linux controller and a custom PCB, and prototyped watchdog, emergency-stop, and fail-closed motor logic with automated tests.
- Designed a multi-jointed arm, gripper, and 12-ball dispenser as parametric, Python-generated CAD for 3D printing, with automated interference and printability checks.

Crowd Track | iOS App (SwiftUI, Firebase, MapKit, CoreLocation) 2024 – Present

- Founded and shipped a SwiftUI app that gives college students real-time, location-based crowd and venue info, backed by Firebase.
- Reached 1,100+ downloads through on-campus promotion and social media, with strong adoption at the University of Missouri.
- Built a GPT-4 Vision pipeline that turns venue promotions into structured Firebase records on a scheduled job.

EXPERIENCE

Ascend Learning, Software Engineer Intern May – Sep 2025

- Built full-stack features in Ruby on Rails for an internal ticketing and support platform used by 800+ engineers.
- Shipped a Confluence plugin that shows live ticket data inside Confluence pages, so support staff stopped switching tools.
- Deployed services on Kubernetes and set up Datadog dashboards and alerts to speed up incident response.

Veterans United, Software Engineer Intern May – Aug 2024

- Maintained and extended 4–10 RESTful APIs in a .NET MVC backend, using TDD to add test coverage on critical paths.
- Fixed production bugs across backend services, shipping through GitLab merge requests and Azure DevOps CI/CD.
- Worked in a 6-person Agile team with pair programming, sprint planning, and code review.

World Agricultural Economic & Environmental Services, Data Engineer Intern Jan – May 2024

- Wrote Python automation that pulls, cleans, and processes up to 5 USDA commodity datasets on demand, replacing a manual process.
- Built client login and a client-facing blog so paying subscribers get members-only content.

SKILLS

Languages: Python, Swift, C, C#, Java, JavaScript, SQL, HTML/CSS
Robotics & Autonomy: Computer vision, motion planning, collision detection, kinematics, simulation (NVIDIA Isaac Sim), embedded Linux, custom PCB design, parametric CAD
Frameworks & Tools: SwiftUI, Ruby on Rails, .NET MVC, React, Node.js, Git, GitLab, Azure DevOps, Kubernetes, Datadog, Firebase, Google Cloud
Practices: Test-Driven Development, automated testing, REST APIs, Agile, CI/CD, Pair Programming

ACTIVITIES

Software Engineer-Prep Club, Member 2022 – Present

Student-led group focused on technical interview prep, system design discussion, and peer coding practice.