

# Ryan Spears

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## Summary

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Software engineer with 4+ years of experience developing scalable web and machine learning applications. Currently completing an accelerated Master's at Carnegie Mellon University, with proven expertise in Python, C#, and SQL. Recognized for rapidly progressing from intern to senior developer, and passionate about mentoring others and driving operational efficiency.

Online Presence: [Github](#) | [LinkedIn](#) | [Personal Site](#)

## Experience

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### Benco Dental

#### Senior Software Developer | 05/2021 - Present

- Mentor junior developers, fostering a culture of learning and development.
- Managed and maintained **20+ critical internal applications**, ensuring high reliability, performance, and minimal downtime.
- Led adoption of advanced CI/CD pipelines, reducing software delivery time by **40%**.
- Advocated for and integrated innovative technologies, such as AI-assisted code completion and streamlined development processes, boosting developer productivity and code quality.
- Designed and implemented complex **SQL** queries and ETL processes to support and enhance application performance, data consistency, and integration across critical internal systems.
- Resolved critical system issues, maintaining a high uptime with expertise in **C# (.NET) and Python**.
- Earned three promotions from intern to senior developer within three years—**fastest progression in company history**.

### Carnegie Mellon University Robotics Institute | PA, Pittsburgh

#### Researcher | 10/2024 - 05/2025

- Designing and developing audio classification algorithms using Python and machine learning to enhance robotic perception in agricultural applications.
- Creating robust data pipelines using ROS (Robot Operating System) for efficient real-time audio data collection and analysis.
- Independently conducting experimental evaluations to optimize model accuracy in classifying environmental sounds, aiding autonomous decision-making for agricultural robotics.
- Documenting methodologies and results to support future advancements in precision agriculture technologies.

## Education

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### Carnegie Mellon University | Pittsburgh, PA

#### M.S. Software Engineering | 05/2025

- 3.99 GPA
- Accelerated program completion in **2 semesters** (normally 4 semesters).

### Florida International University | Miami, Florida

#### B.A. Computer Science

- 3.82 GPA
- Completed degree in **2.5 years** (normally 4 years)

## Skills

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HTML, CSS, JavaScript, Python, SQL, SQL Server Management Studio, .NET, C#, React.js, Next.js, Rust, Git, Computer Science, ROS, CI/CD, Bamboo, DevOps