

My Journey to Microsoft

Jovan Yoshioka

About Me

Hi! I'm Jovan



About Me



Knoxville, TN



Atlanta, GA

About Me



B.S. in Computer Science (2024)



M.S. in Computer Science (2028)

About Me



Software Engineer @ Microsoft

About Me

Fun Fact: I love video-games!



I started playing in 2010!

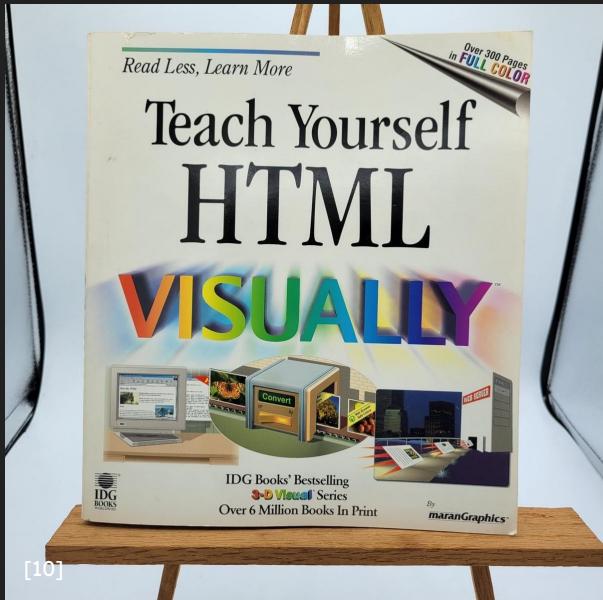
Let's Hear From You!

What are some fun facts about you?



My Path to Microsoft

My First Coding Experiences



[10]

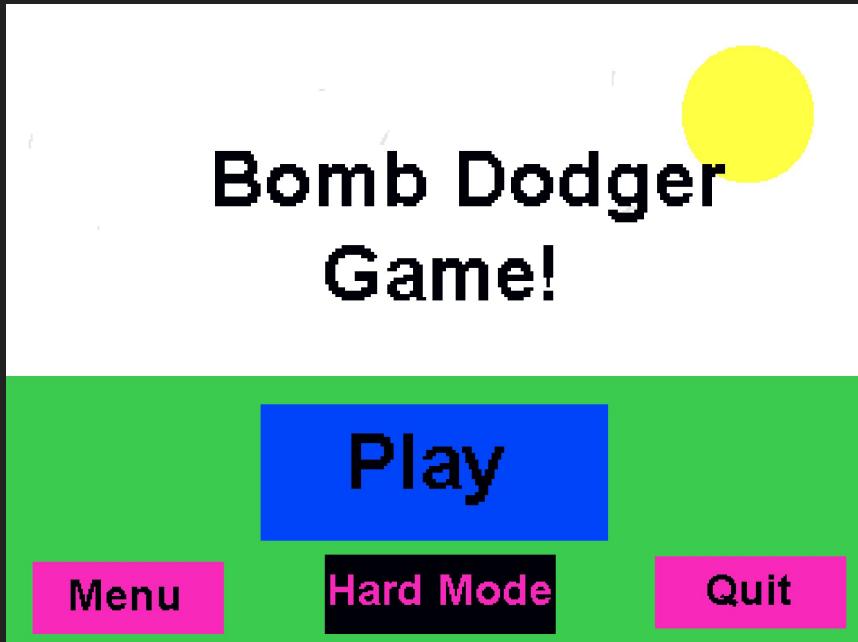


[11]

Self-taught at 10 years old

Created games with Scratch

Scratch

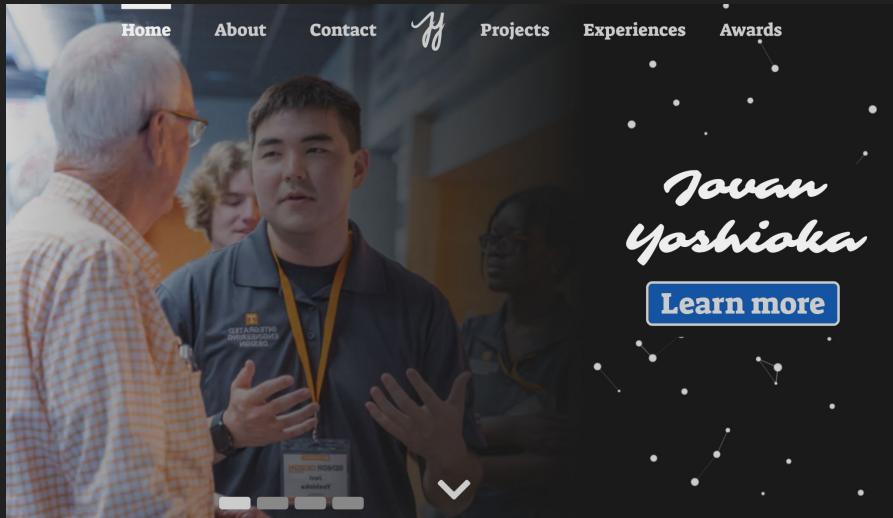


My first Scratch game, made in 2013!

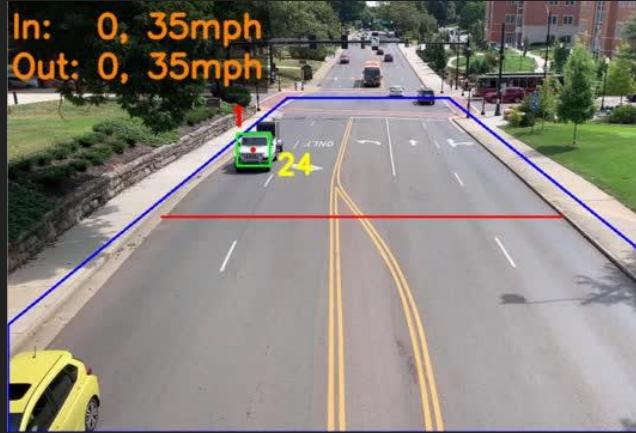
Let's play it!

Scratch (scratch.mit.edu)
“a coding language with a simple visual interface that allows people to create digital stories, games, and animations”

Projects



Personal Portfolio Website
[\(Demo\)](#)



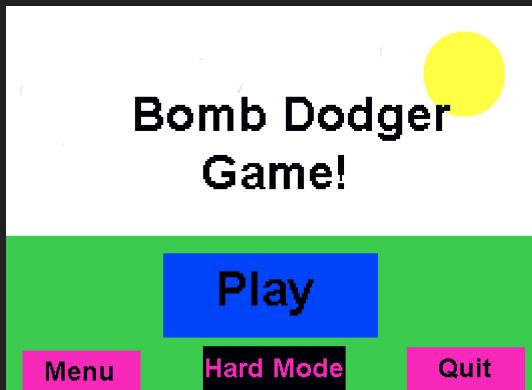
Traffic Tracker
[\(Demo\)](#)



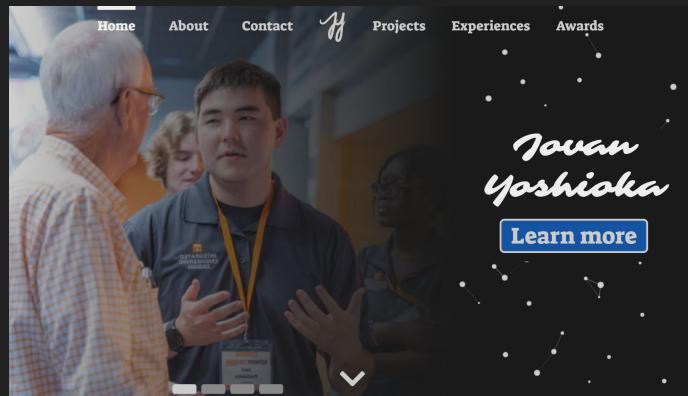
Autopilot Drone
[\(Demo\)](#)

Projects: Main Takeaways

1. Start Basic, But Dream Big
2. Explore & Learn New Skills
3. Try, and **don't give up!**



(2013)



(2020)

Let's Hear From You!

- (1) What STEM project(s) have you worked on?**

- (2) What skill(s) did you learn from that project(s)?**



[9]

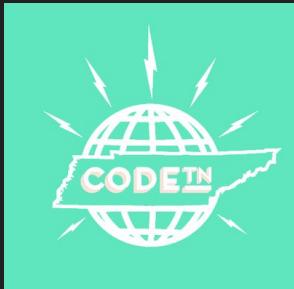
School Clubs



[12]

Middle School

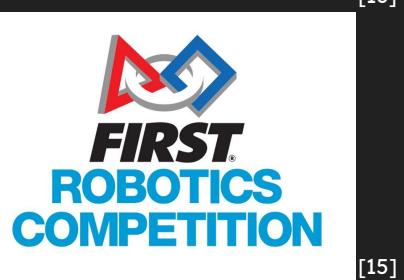
[13]



[14]



High School



[16]

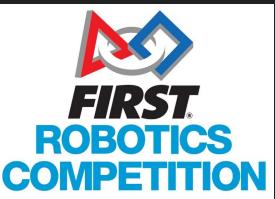


[15]

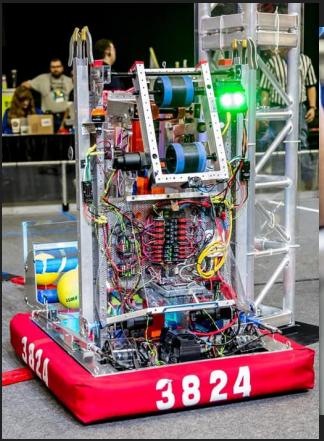


[17]

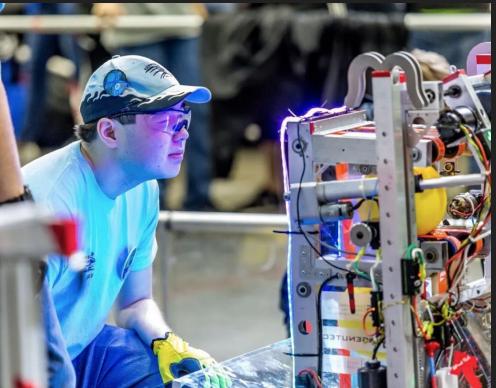
College



School Clubs: Look For...



Hands-On
STEM Experience



Excitement
& Fun!



Professional Development

[18]



“world's largest professional network
on the internet”

Disclaimer: Don't worry about these quite yet, just keep them in mind and revisit in high school.

JOVAN YOSHIOKA
Java, Python, React, JavaScript, HTML/CSS, PHP, SQL
jovanyoshioka.com • linkedin.com/in/jovanyoshioka • github.com/jovanyoshioka
Atlanta, Georgia 30309

EDUCATION

University of Tennessee, Knoxville, Tickle College of Engineering Knoxville, Tennessee
Bachelor of Science in Computer Science, Minors in Machine Learning & Data Science Graduated: May 2024

- Cumulative GPA: 3.99/4.0 | Honors | Dean's List: Fall 2020 - Spring 2024
- Courses: Data Structures and Algorithms (C++), Software Engineering, Engineering-Based Problem Solving

EXPERIENCE

Microsoft Corporation Atlanta, Georgia
Software Engineer Intern May 2023 - August 2023

- Integrated image editing capabilities into SharePoint (**React, Fluent UI**), easing millions of users' pain points.
- Increased rendering performance by minimizing re-rendering and reducing size of images.
- Improved UX by redesigning high-visibility component via multidisciplinary collaboration, ideating/finding fast.
- Validated reliability by creating logs, telemetry dashboards, and automated tests, ensuring 99% success.

Microsoft Corporation Redmond, Washington
Software Engineer Intern June 2022 - August 2022

- Developed dynamic navigation in SharePoint (**React, Fluent UI**) for millions of users to quickly access apps.
- Implemented **RESTful API** proxy endpoints to check user permissions in cross-geo scenarios (**C#**).
- Utilized virtual machines and **Fiddler** to simulate cross-geo calls, enabling debugging and optimization.
- Applied dark launch methods and created telemetry dashboards to find and patch bugs.

University of Tennessee Knoxville, Tennessee
Undergraduate Research Assistant March 2021 - May 2022

- Created an app (**HTML/CSS, JavaScript, PHP, MySQL**) that integrates coding into existing K-12 curriculum.
- Implemented an API to translate and execute custom block-based code (**Blockly**) as **JavaScript**.
- Designed the UX/UI in collaboration with an intercollegiate team and K-5 teachers spanning 2 school districts.
- Led a professional development workshop for 40+ K-5 teachers to gauge app interest and gain feedback.

Oak Ridge National Laboratory Knoxville, Tennessee
Software Engineer Intern June 2021 - August 2021

- Built an app (**React, Django, SQLite**) that visualizes real-time traffic, parking, and EV charging data to enable sustainable campus transportation, improving travel time, safety, and fuel efficiency (\$150K funding).
- Created a vision algorithm (**Python, OpenCV**) to count vehicles/measure speed; 97% accuracy 1K vehicles.
- Integrated **FFmpeg** and multiprocessing to evaluate several real-time videos at once, collecting data 24/7.

PROJECTS July 2020 - Present

Drone Fleet, Individual Project July 2020 - Present

- Programming connected drones (**Python**) to perform actions, e.g. follow, elevate, etc., via UDP connection.
- Devising a vision algorithm (**OpenCV**) to detect a designated commander and track body joint movements.

AllenX Robot, Team Project January 2020 - March 2020

- Programmed all control systems (**Java, WPILib**) of an \$8K 120lb multi-subsystem mobile robot.
- Accelerated scheduler-based autonomous routines by 60% by employing parallelism and path following.
- Demoed to 20K+ people at STEM outreach events. Rank 2 (62 Competitors) at regional competition.

LEADERSHIP September 2020 - April 2023

FIRST Robotics Competition, Programming Mentor September 2020 - April 2023

- Taught 6 high schoolers to code robot subsystems, autonomous routines, and vision algorithms (**Java**).
- Guided students through debugging code to provide exposure to problem solving and teamwork.

Integrated Business and Engineering Program, 2024 Cohort Member April 2021 - May 2024

- Selected as one of 24 engineering/business students based on leadership capabilities and academic achievement to engage in executive mentorship, cross-disciplinary curriculum, and exclusive speaker series.
- Applied systems thinking, design thinking, and strategic decision-making to collaborative, real-world projects.

HONORS & AWARDS

- Best Rookie Hack & Most Market Ready (78 Competitors), UTK Hackathon 2021: schedule generator app.
- 1st Place (150 Competitors, Undergraduate & Graduate), ORNL Intern Symposium 2021: scientific poster.

- 1st Place (55 Competitors, State & National), FBLA 2019: e-book management app (**AWS Cloud9, EC2**).

Resume

Internships

What are internships?

Short-term work experiences with real organizations.

What's the purpose?

Gain real-world experience with exploration, mentorship, and unforgettable memories.

Internships

Starting early helped me get my dream internship later!



2x Internships - Knoxville, TN
(2019 & 2021)

[19]



1x Internship - Seattle, WA (2022)
1x Internship - Atlanta, GA (2023)



[20]

High School Internships @ Microsoft

Microsoft Discovery Program

“Discoverers will have the opportunity to gain hands on project experience, develop professional skills while gaining mentorship from Microsoft employees.”

Open to graduating high school seniors.

[https://careers.microsoft.com/v2/global
/en/discoveryprogram](https://careers.microsoft.com/v2/global/en/discoveryprogram)

Takeaway: It's a long-term goal, but let it fuel your short-term innovation.

Let's Hear From You!

**What is your dream job
or internship?**



[9]

Life @ Microsoft

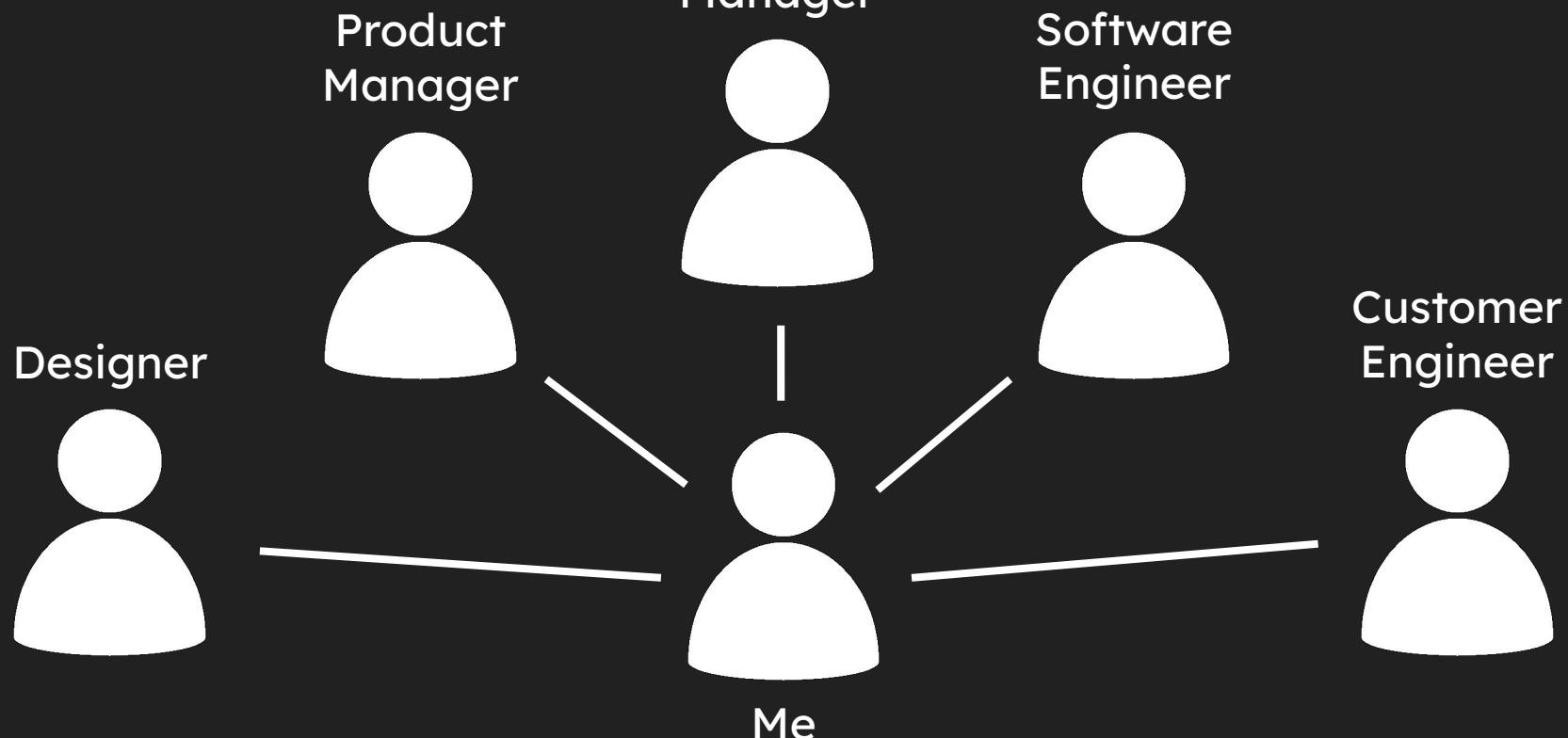
Life @ Microsoft

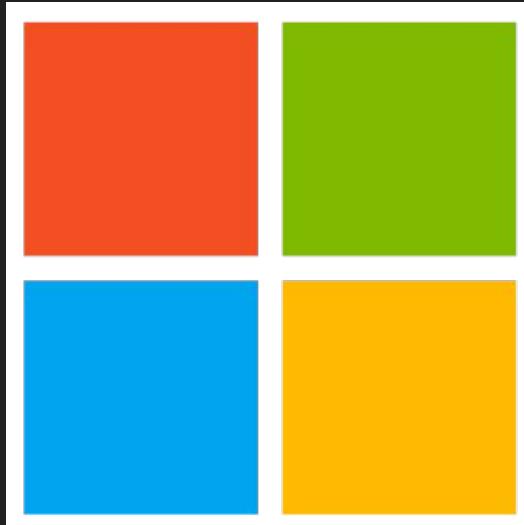
My Typical Day

Problem Solve • Code • Collaborate

Life @ Microsoft

Teamwork is
essential!





[20]

Job Highlights

- Problem Solving & Creativity
- Product Development
- Cross-Disciplinary Collaboration
- Global Impact (Millions of Users)
- Good Work-Life Balance

Life @ Microsoft



Fun Benefits

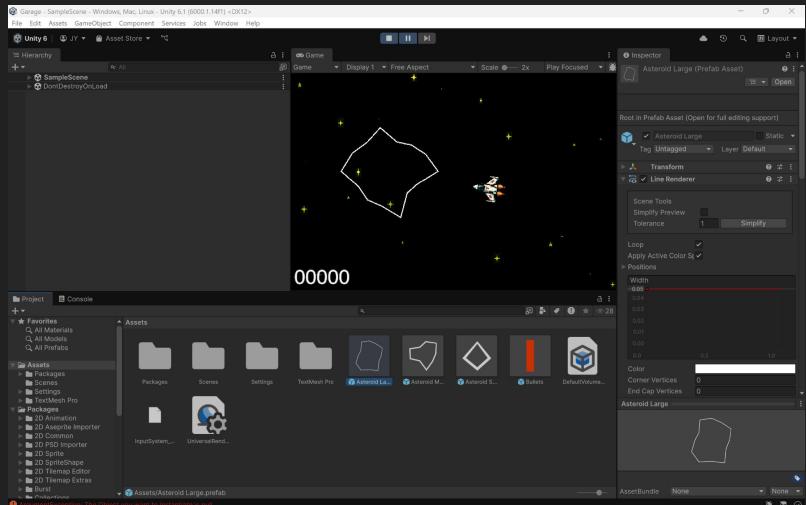
- Free Drinks
- Mini-Golf
- Delicious Cafeteria
- Morale Events
- “The Garage”

Life @ Microsoft

Collaborate across Microsoft...



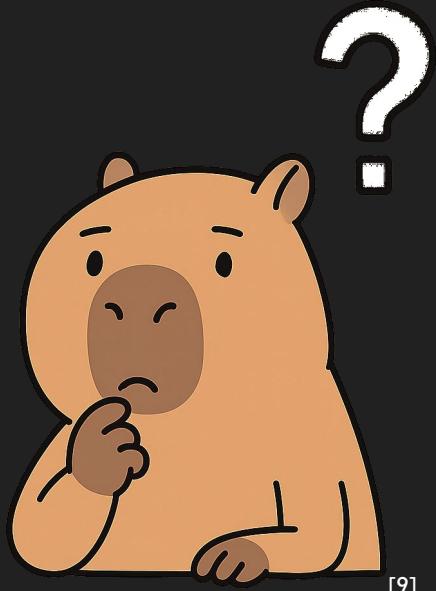
...to learn new skills!



Game Development Workshop @ “The Garage”
Hosted by Minecraft Software Engineer

Let's Hear From You!

Any Questions?



[9]

Image Sources

- [1] <https://homeandmoney.com/blog/pros-and-cons-of-moving-to-knoxville-tn/>
- [2] <https://sentral.com/sentral-stories/what-its-like-living-in-atlanta>
- [3] <https://slateat901.com/a-brief-history-of-the-university-of-tennessee-utk/>
- [4] <https://www.gtalumni.org/s/1481/alumni/17/magazine-pages.aspx>
- [5] <https://www.microsoft.com/en-us/microsoft-365/sharepoint/collaboration>
- [6] <https://news.instant-gaming.com/en/articles/12370-fortnite-is-set-to-make-a-comeback-on-ios-in-the-u-s>
- [7] <https://news.xbox.com/en-us/2024/05/17/minecraft-15-years-most-important-moments/>
- [8] <https://gifdb.com/gif/thanos-orange-justice-fortnite-dance-emote-21qlk1lutr40bqc.html>
- [9] <https://chatgpt.com/> (AI-generated capybara)
- [10] <https://www.ebay.com/itm/387038852131>
- [11] <https://www.progkids.com/en/blog/istoriya-scratch>
- [12] <https://commons.wikimedia.org/wiki/File:Scratchlogo.svg>
- [13] https://x.com/Code_TN
- [14] <https://www.d120.org/fbla-students-earn-awards-at-state-competition/>
- [15] <https://en.wikipedia.org/wiki/CyberPatriot>
- [16] <https://www.youtube.com/firstroboticscompetition>
- [17] <https://www.facebook.com/hack4impact/>
- [18] <https://www.logo.wine/logo/LinkedIn>
- [19] <https://www.drupal.org/oak-ridge-national-laboratory>
- [20] <https://www.logo.wine/logo/Microsoft>
- [21] <https://www.tomshardware.com/tech-industry/microsoft-drags-feet-on-proposed-atlanta-campus-that-would-generate-15000-jobs-now-the-city-wants-answers>
- [22] <https://news.xbox.com/en-us/2024/05/17/minecraft-15-years-most-important-moments/>