Zayne Lumpkin

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Education

University of Texas at Dallas — **4.0 GPA**
MS in Computer Science — *August 2022 - May 2024*
- Dual concentrations in traditional computer science and interactive systems

University of Texas at Dallas — **4.0 GPA**
BS in Computer Science — *August 2020 - May 2023*
- Graduated with quadruple honors: summa cum laude, Collegium V Honors Program, National Merit Scholars Program, & Phi Kappa Phi national honor society
- Earned degree in three years while maintaining a perfect GPA and awarded Dean's List every semester

Work Experience

Paycom — **Dallas, TX**
Software Developer — *December 2023*
- Creating scalable, maintainable systems for dynamic configuration and dataflow infrastructure, and UI for interacting with them
- Designing internal domain-specific languages and writing compilers for them
- Using React, TypeScript, C#, & PHP to write production code affecting millions of users

Paycom — **Dallas, TX**
Software Development Intern — *May 2023 - December 2023*
- Architected and implemented complex, interactive React components and systems for specialized usage with NextJS and Material UI
- Awarded MVP for software development interns, out of 193

UT Dallas Student Government — **Richardson, TX**
Technology Committee Chairman — *May 2022 - May 2023*
- Coordinated and organized the largest hackathon in the Central Time zone, HackUTD
- Managed a small team which oversaw a $120,000 budget, planning and executing large-scale technological events and demonstrations

Association for Computing Machinery — **Richardson, TX**
Machine Learning Researcher — *December 2021 - May 2022*
- Headed a team of four researchers using Python, Flask, TensorFlow, Jupyter Notebooks, & Google Colaboratory to train a convolutional neural network which processed big data stored in JSON and audio formats to classify genre with 94.3% accuracy

Personal Projects

3D Lindenmayer-Systems — In React and using THREE.js, created a three-dimensional L-System renderer and controller in browser [zayne.lu/l-system]
Assembly platformer — In MIPS assembly, developed a game with Newtonian kinematics, pixel-perfect collisions, and optimized redraws
Modular parser — Designed an advanced, flexible, modular arithmetic/logical bottom-up expression parser using classical algorithms
Sudoku solver — Created a Sudoku solver using set theory, inductive logic, and dancing links

Accomplishments

Year		Location
2023	**Software Development Intern MVP**, Paycom	*Dallas, TX*
2023	**Hackathon MVP**, Paycom	*Dallas, TX*
2020-23	**Dean's List x6 (every undergraduate semester)**, UT Dallas	*Richardson, TX*
2022	**Foundations of Organizational Behavioral Management Certificate**, APMG	*Amsterdam, NL*
2020	**National Merit Scholar**, The College Board	*Austin, TX*
2019	**National Young Leaders Summit**, Youth Leadership Consortium	*Chicago, IL*

Skills

Languages — Java, JavaScript, TypeScript, Python, C, C++, C#, SQL, HTML/CSS
Technologies — React, Git, NextJS, UNIX, relational databases (MySQL), Jira, LaTeX, Adobe Suite, Office suite, RESTful APIs
Concepts — Algorithmic design & analysis, TCP/IP & OSI networking, OOP, computer architecture, Agile, test-driven development