

# Dallas White

Website: <https://dallaswhite.dev>

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## Experience

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### Year-Round Software Development Intern

August 2020 – April 2025

Toshiba Global Commerce Solutions

- Architected and managed 5-node Elasticsearch clusters for clients, each handling 100GB+ of monthly data to provide high-availability, centralized access to Point of Sale telemetry.
  - Analyzed data from thousands of stores using Python and Kibana to provide insight into Point of Sale operations including failure rates, transaction times and system load, increasing detection ability and reducing resolution times for customer issues.
  - Developed a React-based platform to help customers manage Point of Sale machines on a large scale. Including deploying software, viewing lane status, and performing maintenance.
  - Fixed multiple critical bugs impacting customer facing applications to improve application stability and customer experience.
  - Collaborated within a 5-person Agile team to deliver high quality software and solve customer issues.
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## Skills

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**Programming Languages:** Python, Java, JavaScript, Typescript, C, C++, Rust

**Technologies:** SQL, Elasticsearch, Docker, Git, Linux

**Frameworks:** React, OpenTelemetry, Astro, Numpy

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## Education

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### University of Arkansas

Graduating May 2026

Bachelors in Computer Science

**Relevant Coursework:**

Algorithms, Database Systems, Data Mining, Artificial Intelligence, and Information Retrieval

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## Certifications

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- General class HAM Radio License
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## Projects

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### Maximal Sand

Stack: C++ WebAssembly, HTML, SDL2

<https://dallaswhite.dev/projects/maximalsand>

- Wrote and optimized a multi threaded Simulator with Spatial Partitioning in C++ achieving speeds of 320 Frames Per Second
  - Designed and Implemented a Window manager to draw windows such as help windows.
  - Compiled the Game with Emscripten to work in a variety of browsers using WebAssembly.
  - Designed windows that dynamically scale based on the size of the users screen
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### ASCII Video Encoder

Stack: Python, FFmpeg, PIL, Numpy

<https://dallaswhite.dev/projects/asciencoder>

- Designed a parallelized video processing pipeline in Python using Multiprocessing to convert standard video files into ASCII.
- Leveraged FFmpeg for frame-level extraction and re-encoding, utilizing NumPy for compute-heavy image transformations
- Added multiple color modes such as Grey-scale, 16 Color, and True-color. Encoded a clip of the matrix in Green-scale