

Ethan Tompkins

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EDUCATION

Clemson University, Clemson, SC

May 2023

- **Bachelor of Science Computer Science**
- **Awards/Honors:** President's List, Dean's List, Palmetto Fellows Scholarship

WORK EXPERIENCE

Software Engineer, Itron

May 2023 – Present

- Developed supply chain applications utilizing C# .NET and C++ for automated soldering and solder inspection processes, resulting in a 99.96% manufacturing success rate for +40,000 electrical boards.
- Built a forecasting feature for Itron Temetra that generates 48-hour forecasts from the last water sensor readings, enhancing decision-making capabilities for utility operations. Implemented in Python while leveraging Keras, scikit-learn, and pandas.
- Implemented CI/CD pipelines through Azure DevOps for automatic builds and releases to Azure cloud servers.

Machine Learning Researcher, Clemson University

December 2021 – May 2023

- Developer on ColorNet 1.5, a machine learning solution developed with PyTorch for simultaneously correcting multiple brand colors during a live sports broadcast.
- Designed a modified neural network architecture to allow for flexibility when handling a complex range of color correction scenarios, yielding a 65.42% performance increase compared to the previous model.
- Co-Authoring research papers accepted by the Technical Association of the Graphic Arts (TAGA).

Software Engineer Intern, Boeing

August 2022 – December 2022

- Created and programmed a unit load device application using Python and SQLite for temperature maintenance during transportation in the cold chain.
- Built a custom interface for remote hardware control, monitoring, and data logging using the T3 stack (Next.js, TypeScript, Tailwind CSS).
- Designed a control algorithm in Node.js to monitor compressor controls and maintain user settings.

Software Engineer Intern, Knack Works

May 2022 – August 2022

- Developed an in-house Kubernetes visualization tool using Vue.js, Apollo GraphQL, and Kubernetes Python Client for developers to monitor system metrics.
- Programmed a network file system crawler with Python and JavaScript to automate data retrieval and internal organization tasks.
- Implemented cron job scheduling for crawler application, improving efficiency and resource management during searches.

SKILLS

- **Languages:** Python, C#, C++, JavaScript, SQL, HTML/CSS
- **Frameworks/Technologies:** Vue.js, Node.js, Express.js, .NET, ASP.NET, PyTorch, RESTful/SOAP, Azure DevOps Server, Git