# Eswar Talasila

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#### **EDUCATION**

# **North Carolina State University**

College of Engineering Junior

B.S. in Computer Science | Concentration in AI

- **GPA**: 3.8 / 4.0
- **Relevant Coursework**: Software Engineering, Data Structures and Algorithms, Operating Systems, C and Software Tools, Software Development Fundamentals, Discrete Mathematics

### **EXPERIENCE**

### **Software Engineer Intern**

**Pioneer Quest Solutions** 

Jan 2025 - Present

Raleigh, NC

Expected: May 2026

- Engineered and deployed 3 full-stack features using React and Spring Boot, reducing page load times by **35%** and improving user engagement metrics
- Implemented automated testing protocols achieving 92% code coverage, resulting in a 40% reduction in post-deployment issues
- Collaborated with a team of 6 developers, engaging in code reviews and version control using git to refactor legacy codebase, aligning with business strategy initiatives and resulting in **45%** improved system performance
- Applied decision-making and problem-solving skills to troubleshoot and optimize key software processes

#### **Website Maintenance Assistant**

June 2021- Sep 2021

Gatik Junior College

- Spearheaded a team of 7 students to design and implement new features using agile methodologies for the school website leading to 25% increased traffic over three months
- Implemented HTML and JavaScript to develop new front-end features, improving user engagement by 20%
- Headed the optimization of site performance leading to a 27% increase in site responsiveness
- Executed rigorous testing using developer tools, identifying and resolving bugs, reducing user-reported issues by 23%

## **PROJECTS**

# **ESTVP** (Earth Surface Temperature Visualization Platform)

Nov 2024

- Spearheaded the development of an advanced machine learning model utilizing **PyTorch** to forecast global surface temperatures, achieving predictions based on **90 years** of historical climate data
- Designed a robust web-based visualization system using Plotly, is with integrated choropleth mapping capabilities
- Pioneered efficient data processing pipelines using Pandas and NumPy to optimize the handling of large-scale climate datasets efficiently

# **User Activity Analytics Platform**

Oct 2024

- Engineered a sophisticated user activity tracking system using Java, leveraging custom data structures and algorithms to process and analyze large-scale log data with optimized time complexity
- Designed custom map-based data structures and sorting algorithms, achieving efficient log entry processing and real-time activity analysis
- Developed robust reporting functionality to generate actionable insights, including user behavior patterns, temporal analysis, and activity frequency metrics
- Devised comprehensive unit testing with 100% method coverage and >95% line coverage, ensuring high code quality and reliability

### Weather Data Analyzer

May 2024

- Created a Python script to analyze and visualize historical weather data for 3 cities
- Executed data parsing from CSV files, performing statistical analysis on 1,000+ weather records
- Created visualizations using matplotlib, revealing 5-year trends in temperature and precipitation

# **SKILLS**

- Languages: Java, Python, C, Rust, JavaScript, SQL, HTML, CSS, YAML
- Frameworks/Libraries: ReactJS, NodeJS, Spring Boot, PyTorch, NumPy, Pandas, DevOps, Tauri, Tailwind CSS
- **Software:** Git, Postman, VS Code, Eclipse IDE, Jenkins, Docker
- Data Analysis/Visualization: SciKit-Learn, Matplotlib, SciPy
- **Certifications:** Certified Python Programmer (PCEP)