

# Jotham Teshome

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## EDUCATION

<b>Michigan State University</b> Master of Science, Computer Science	January 2023 - August 2024 GPA: 3.85
<ul style="list-style-type: none"><li>Relevant Coursework: Natural Language Processing, Computer Vision, Pattern Recognition, Deep Learning, Algorithmic Graph Theory, Distributed Systems</li></ul>	
<b>Michigan State University</b> Bachelor of Science, Computer Science, Minor in Business	September 2019 - December 2022 GPA: 3.69
<ul style="list-style-type: none"><li>Relevant Coursework: Data Structures &amp; Algorithms, Operating Systems, Computer Networks, Algorithm Engineering, Web Application Development, Database Systems</li></ul>	

## WORK EXPERIENCE

<b>Stefanini Group</b> - <i>Application Development Intern, SAP Integration</i>	April 2025 - Present
<ul style="list-style-type: none"><li>Created a <b>Python</b> accelerator to automate the generation of <b>SAP</b> Business Process Documents, cutting documentation time by <b>70%</b></li><li>Integrated backend functions with an existing <b>AI chatbot</b>, enabling automation through conversational interfaces using <b>REST APIs</b></li><li>Designed and executed a phased migration strategy to merge <b>AWS APIs</b> into a unified <b>Azure</b> system, improving reliability by <b>25%</b></li><li>Integrated a Plant Assistant tool with <b>SAP PM</b> solutions to improve process automation, reducing manual errors by <b>15%</b></li></ul>	
<b>Versive</b> - <i>Machine Learning Engineer (Project-Based)</i>	June 2024 - December 2024
<ul style="list-style-type: none"><li>Built <b>CNN</b> models in <b>PyTorch</b> to detect tumors in MRI scans, enhancing diagnostic accuracy by <b>10%</b> and supporting early detection</li><li>Boosted model performance by <b>10%</b> through <b>YOLOv8 segmentation</b> to focus on critical tumor regions during prediction</li><li>Applied <b>transfer learning</b> with pretrained <b>ImageNet</b> weights to reduce training time <b>30%</b> and improve precision across scans</li></ul>	
<b>Michigan State University</b> - <i>Graduate Teaching Assistant</i>	August 2023 - May 2024
<ul style="list-style-type: none"><li>Guided students in building responsive front-end projects using <b>HTML</b>, <b>CSS</b>, and <b>JavaScript</b></li><li>Improved student project outcomes by <b>7%</b> through office hours and support with <b>Flask</b> back-end design and <b>GitLab</b> version control</li><li>Reviewed and graded technical assignments for the <b>Web Application Development</b> course, ensuring rigorous academic standards</li></ul>	
<b>Versive</b> - <i>Software Engineer (Project-Based)</i>	January 2023 - July 2023
<ul style="list-style-type: none"><li>Developed a secure hospital app with <b>AWS Amplify</b> and <b>RDS</b>, improving MRI access times and reducing verification time by <b>20%</b></li><li>Built <b>Flask</b> APIs and connected <b>MySQL</b> backend with <b>React</b> frontend for seamless user experience</li><li>Ensured patient data security with encryption, <b>RBAC</b>, and <b>MFA</b>, achieving <b>100% compliance</b> with HIPAA standards</li><li>Leveraged <b>Docker</b> containers and <b>Git</b> for deployment and version control, improving development cycle efficiency by <b>15%</b></li></ul>	
<b>MSU Federal Credit Union</b> - <i>Software Engineer Intern</i>	September 2022 - December 2022
<ul style="list-style-type: none"><li>Designed a peer-to-peer transfer system in <b>Flutter/Dart</b> with QR code and NFC support, increasing user transaction speed by <b>25%</b></li><li>Integrated <b>Google Places API</b> to send personalized deal notifications based on shopping patterns, boosting app engagement by <b>18%</b></li><li>Contributed to app improvements using <b>Flutter</b>, <b>Dart</b>, and <b>SQL</b>, enhancing overall app stability and reducing crash rates by <b>12%</b></li></ul>	

## PROJECTS

<b>Identifying and Removing Toxic Comments</b> , <i>Python, TensorFlow</i>	
<ul style="list-style-type: none"><li>● Built an <b>RNN</b> model in <b>TensorFlow</b> to detect toxicity in online comments, collaborating with a peer for model architecture</li><li>● Generated subword embeddings using <b>FastText</b> to better detect potential variations of toxic words in comments</li><li>● Achieved a word-level classification accuracy of <b>91%</b> using trigram embeddings in our multi-appearance word model</li><li>● Developed an automated system to censor toxic words to improve the efficiency of real-time content moderation</li></ul>	
<b>Portfolio Website</b> , <i>NodeJS, NextJS, ReactJS, Bootstrap, JavaScript</i>	
<ul style="list-style-type: none"><li>● Designed a responsive portfolio website using <b>ReactJS</b> to display my experience and various projects</li><li>● Optimized performance through static site generation using <b>NextJS</b> to ensure a quality user experience</li><li>● Integrated a modern UI using <b>Bootstrap</b> to create a polished, aesthetically pleasing interface</li></ul>	

## SKILLS

<b>Programming:</b>	Python, C/C++, Java, Kotlin, CUDA, JavaScript, TypeScript, HTML, CSS, SQL, Dart
<b>AI/ML:</b>	PyTorch, TensorFlow, Scikit-learn, Numpy, Pandas, YOLO, OpenCV, FastText, OpenAI API
<b>Web &amp; App Dev:</b>	React, Next.js, Node.js, Flask, Flutter, Bootstrap
<b>Databases:</b>	MySQL, PostgreSQL, DynamoDB, MongoDB
<b>Cloud Platforms:</b>	AWS (EC2, CDK, S3, Lambda), GCP, Azure
<b>DevOps &amp; IaC Tools:</b>	Docker, Git, CI/CD, GitHub Actions, RabbitMQ, REST APIs
<b>Tools &amp; Platforms:</b>	Linux, Unix, Windows, macOS, Bash, SAP, Postman