

# Youdahe Asfaw

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## EDUCATION

### Gustavus Adolphus College

*Bachelor of Science in Computer Science & Statistics*

*Expected Graduation : 2028*

- **Relevant Coursework:** Introduction to Data, Object-Oriented Programming, Data Structures and Algorithms

## TECHNICAL SKILLS

**Languages:** Python, TypeScript, Java, JavaScript, SQL (MySQL), HTML/CSS

**Frameworks:** Flask, Streamlit, LangChain, Tailwind CSS, Three.js, Vite, Tesseract.js, Web APIs, React.js, Express.js

**Developer Tools:** Git, GitHub, VS Code, Google Cloud Platform, Postman, Node.js, MongoDB, Twilio, Docker, AWS

## EXPERIENCE

### Undergraduate Teaching Assistant

Aug 2025 – Present

*Gustavus Adolphus College*

*Saint Peter, MN*

- Manage over 70 students in CS I & II covering programming, data structures, and algorithms through labs, tutoring, and review sessions, ensuring consistent learning outcomes and stronger student performance
- Collaborate with faculty to design exercises, lead weekly support sessions, and mentor individuals on technical concepts, improving confidence, retention, and understanding of core computer science material

### Software Engineer Intern

Jun 2025 – Present

*BlueBill*

*Remote*

- Built a Twilio-powered SMS bot and Flask dashboard for 150+ contractors, streamlining invoice submissions across multiple time zones, reducing manual coordination, and improving communication efficiency by 40%
- Integrated Supabase with PostgreSQL and Stripe APIs for real-time payment tracking while adding role-based access controls, reducing errors during financial reviews and improving invoice triage accuracy for administrators

### Software Engineer Intern

May 2025 – Present

*Knead*

*Remote*

- Led backend development of Knead's forum using Express.js, MariaDB, Redis, and Docker, optimizing caching and queries to reduce API latency from 400ms to under 150ms while supporting over 1K concurrent users.
- Implemented JWT-based authentication with Auth0, Redis cache validation, CI/CD pipelines, and real-time moderation features, strengthening security, ensuring scalable deployments, and enabling faster integration across product teams.

### Software Developer Intern

March 2025 – Present

*Gustavus Adolphus College*

*Saint Peter, MN*

- Built two student-facing applications GustieGo (2K projected users) and Student Gustavus mobile app (500 monthly users) reaching 2.5K combined students and modernizing scheduling and campus engagement.
- Partnered with the Dining Department and Technology Services to align requirements, leveraging Node.js, Express, React, and PostgreSQL, while scaling with Redis caching and load balancing for peak reliability.

### AI & Accessibility Research Assistant

Feb 2025 – Present

*Gustavus Adolphus College*

*Saint Peter, MN*

- Developed an AI-powered accessibility app that scans forms with Azure Form Recognizer and LayoutLMv3, reads bounding boxes aloud, and uses LangChain to guide users through conversational completion.
- Presented research at conferences across Austin, MN, St. Louis, and beyond, benchmarking accuracy, latency, and usability, and increasing successful form completion rates for visually impaired users by 35%

### Software Engineer Intern

Aug 2023 – Aug 2024

*Medtronic*

*Mounds View, MN*

- Automated and optimized manual Excel-based pipelines into Python and SQL workflows, reducing delivery time by 50% while improving reporting accuracy across eight R&D teams tracking over \$2.5M in metrics
- Built interactive dashboards to monitor research data and led 12+ user acceptance tests with engineers and PMs, ensuring adoption of tools and delivering real-world improvements in reporting efficiency

## PROJECTS

### Koding 4 Kids | *React, TypeScript, Node.js, Express.js, SQL, JWT, Auth0, Redis*

June 2025 – Present

- Built a full-stack gamified coding platform with React, Node.js, SQL, Auth0, and Redis, featuring recorded lessons and an AI agent ("Blossom") that queries the database in real time to guide student progress.
- Secured \$10K funding, grew a 100+ student waitlist, and launched pilots in 2 schools and 1 library, expanding access to computer science education in Minnesota..

## LEADERSHIP & INVOLVEMENT

### Founder & President

Jan 2025 – Present

*POC in STEM*

*Gustavus Adolphus College*

- Grew active membership from 5 to 40+ students through targeted outreach, inclusive programming, and consistent peer support, establishing POC in STEM as a core student-led resource on campus.
- Organized career-focused events and mentorship panels featuring members who secured roles at Amazon, Bloomberg, Salesforce, and Qualcomm, inspiring underclassmen to pursue competitive internships