THOMAS WALTER

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SUMMARY

Software engineer and data analyst with hands-on experience in full-stack development, AI automation, and embedded systems. Proven track record building solutions across climate consulting, medical research, and IoT, with strong foundations in Python, React, Flask, and SQL.

EDUCATION

Yale University, New Haven, CT   *Expected Graduation Dec. 2025*
B.S. in Computer Science | GPA 3.72
Relevant Coursework: Algorithms, Systems Programming, Database Systems, Full Stack Web Development, Data Structures, Computational Game Intelligence, Software Engineering, Big Data Systems, Real Analysis, Linear Algebra, Multivariable Calculus

TECHNICAL SKILLS

- *Proficient:* Python, Java, C/C++, JavaScript/TypeScript, HTML, CSS, React, Node.js, Flask, Git, Linux, Unix, TensorFlow, PyTorch, SQL, PostgreSQL, REST APIs, MCP, Zapier, AI prompt engineering, OPC UA
- *Familiar:* R, Rust, IoT Protocols & Standards (MQTT, UDP, TCP), AWS3, Google Cloud Platform, NoSQL

EXPERIENCE

OnePointFive, *Data Analyst Associate*, New York, NY   *June 2025 - present*
- Led company-wide AI Training & Advisory program by developing custom automations and workflows using Zapier, Python, webhooks, and REST APIs; established prompt engineering best practices and AI governance policies
- Integrated 5+ custom MCP servers into employee workflows, enhancing productivity with human-in-the-loop AI agents and saving over 60 workdays annually
- Developed full-stack application (Python, React, Flask, SQL, JavaScript) leveraging OpenAI API to analyze RFPs, recommend experts from a 1,000+ member network, and auto-generate proposals—reducing proposal time by 5+ hours each
- Built REST API and webhook-based pipelines to automate data transfers across Zoom, Airtable, Notion, Slack, and Google Drive
- Conducted GHG accounting and data audits for OPF clients and co-authored OPF's internal 2024 emissions report

Blenman Innovation Group (Yale School of Medicine), *Software Engineer*, New Haven, CT   *January - May 2025*
- Developed *visAPPprot*, a full-stack application for hospitals, clinics, and researchers to visualize and analyze patient omics data (~15 hrs/week)
- Contributed across the entire tech stack using SQL, R, Python, JavaScript, TypeScript, HTML, and CSS
- Co-authored a peer-reviewed paper published at "EuroVis 2025", highlighting the technical challenges in building clinical research software

Schneider Electric, *Firmware Engineer Intern*, Marktheidenfeld, Germany   *May - August 2024*
- Collaborated with a 10-person team in an agile environment, contributing to three-week sprints through daily standups, biweekly technical reviews, and iteration planning
- Developed Python and Bash scripts to test the team's embedded OPC UA server, improving automation and debugging efficiency
- Built data pipelines to parse, organize, and analyze outputs from the OPC UA Compliance Test Tool (CTT)
- Researched client-side configuration and testing tools, gaining deep familiarity with IoT communication protocols including OPC UA, TCP, UDP, UADP, and MQTT

SELECTED PROJECTS AND EXTRACURRICULARS

"Challenges in Development, Distribution, and Maintenance of Software Visualization Tools in Biology and Medicine"
- Paper discussing challenges in developing Blenman Innovation Group software VisAPPprot, a full stack web program offering alternative visualization of common omics, published at EuroVis 2025 conference

Cello Performance
- *Teachers:* Ole Akahoshi (Yale School of Music), Hayoung Choi (Emanuel Feuermann Conservatory), Kian Soltani (Music Academy Liechtenstein)
- *Orchestras:* National Youth Orchestra of Germany, Yale Symphony Orchestra, World Youth Symphony Orchestra
- *Competitions:* Juilliard & NEC acceptances (2019), 1st Prize German Regional/State Youth Music Competitions, 2nd Prize German National Youth Music Competition, Lunigiana International Music Festival Competition Winner, Turin Chamber Music Festival Guest Artist, 1st Prize Grand Prize Virtuoso Competitions Amsterdam & Salzburg
- *Scholarships and Awards:* Interlochen Fine Arts Award, Turin International Chamber Music Festival Guest Artist, Neumann Foundation Scholarship Winner