Tanaka Makoni

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EDUCATION

Davidson College   **Davidson, NC**
Bachelor of Science, Computer Science   *Expected May 2028*
- Relevant Coursework: Linear Algebra, Data Structures, Game Development, Discrete Structures,   GPA: 3.9/4.0
  Human Computer Interaction

WORK EXPERIENCE

Algorithms for Learning in Physics Applications (ALPhA) Lab   **Davidson, NC**
Undergraduate Researcher   *May 2025 - July 2025*
- Enhanced understanding of latent space representations in TPCNet, a self-supervised deep learning model based on PointNet, to capture key features of 3D point cloud data from the Active-Target Time Projection Chamber (AT-TPC)
- Applied machine learning techniques including linear/logistic regression, support vector machines (SVM), and clustering methods like K-means and t-SNE

The Jay Hurt Hub for Innovation and Entrepreneurship, Davidson College   **Davidson, NC**
Student Consultant   *May 2025 - Present*
- Built an automated payout and transaction logging workflow using n8n and Zapier, integrating Forest Systems, Bill.com, and Excel to handle multi-party fee splits, API/webhook events, and CSV-based financial recordkeeping.
- Researched and evaluated AI-powered website builders to support the Hurt Hub's website redesign, analyzing platform capabilities, pricing, and support resources, and presented strategic recommendations to key stakeholders.
- Collaborated with Jan Black Marketing & Photography to redesign a client-facing website that improves navigation, protects digital content, streamlines booking and purchasing workflows, and integrates social media.

PROJECTS

Course Review Aggregator — *Full-Stack Web App*
Personal Project | Python, Flask, Selenium, JavaScript, JSON   *July 2025*
- Built a Flask-based platform that scrapes and aggregates professor reviews from RateMyProfessors, Reddit, and university sites to help students compare CS and business courses
- Engineered a Selenium + BeautifulSoup pipeline to extract, clean, and store ratings, tags, and review data in structured JSON format

Cost of Living Explorer — Interactive Data Visualization Web App
Personal Project   *March 2024*
- Built a full-stack web application using SvelteKit and D3.js to render a zoomable, interactive choropleth map of U.S. states based on regional cost of living data
- Used D3.js for map projection, pan/zoom behavior, dynamic color scaling, and tooltips tied to state-level affordability metrics
- Fetched and integrated cost data from the Numbeo API and MIT Living Wage datasets; processed GeoJSON to align economic data with spatial regions

CAMPUS INVOLVEMENT

HACK@Davidson   **Davidson, NC**
Sponsorship Team Lead   *October 2024 - Present*
- Secured and managed sponsorships from leading tech companies in the greater Charlotte area, raising $10,000+ in funding to support event logistics, prizes, and participant engagement
- Coordinated with sponsors to promote their brand through event materials, social media, and virtual booths, increasing sponsor visibility and engagement by 25%

Davidson Entrepreneurship Club   **Davidson, NC**
Social Media & Marketing Lead   *April 2025 - Present*
- Drive marketing strategy and content creation on Instagram and LinkedIn, boosting engagement and broadening reach across academic departments.
- Organized Davidson's 2025 Techstars Startup Weekend, raising $5,000+ in sponsorships and engaging 35+ participants in a 54-hour entrepreneurial event.
- Selected as 1 of 15 students for the 2025 Truist University Immersive Learning Experience, collaborating with Truist, AWS, and IBM to design and prototype innovative solutions for showcase at the 2026 Truist Championship.

SKILLS

- **Programming & ML**: Python, SQL, Java, JavaScript, TensorFlow, PyTorch, Scikit-learn
- **Data & AI Tooling**: Pandas, NumPy, Polars, Matplotlib, NLP pipelines, sentiment analysis
- **Web & Deployment**: Flask, Django, HTML, CSS, Bootstrap, APIs, webhooks, Git
- **Design & Visualization**: D3.js, Chart.js, Figma, Unity
- **Awards:** Belk Merit Scholarship; Chidsey Fellow; Hack@Davidson 2025 "Best AI Chat Tool"; Leonard Fund Recipient 2025; DataDog NYC AI Agents Hackathon "Best use of Structify"