

Aden Barcroft

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EDUCATION

Georgetown University

B.S. in Computer Science

- **Relevant Coursework:** Data Structures, OOP, Algorithms, Linear Algebra, Machine Learning, Data Science

Washington DC | May 2027

3.8 GPA

Mahidol University

B.S. in Computer Science

Thailand | July 2025 (Transfer)

4.0 GPA

EXPERIENCE

Software Engineering Intern

Zyp

Dec. 2025 – Mar. 2026

Remote

- Redesigned core site layout and interactions using **Next.js**, improving page load times and UI clarity
- Built a dynamic **BPO company directory** with AI-assisted ranking logic that balances paid placements, engagement frequency, and randomized ordering, increasing directory click-through rates by **41%**
- Implemented a **Stripe-powered** payment and onboarding flow connected to a **PostgreSQL** backend listings

Teaching Assistant

Mahidol University

Apr. 2024 – July 2025

Thailand

- Developed a Python-based auto-grader, reducing grading time by over **70%**
- Created and distributed practice tests that increased student exam performance by **22%**
- Led weekly group tutoring sessions for over 80 students, increasing average attendance

PROJECTS

Alzheimer's MRI Image Classifier | TensorFlow, Python, NumPy, Matplotlib, scikit-learn

Jul. 2025

- Achieved **95.86% validation** accuracy using a CNN to classify grayscale MRI scans by Alzheimer's severity
- Engineered robust preprocessing pipeline: normalized images, and applied one-hot encoding
- Processed 6,000+ byte-encoded MRI images from Kaggle, converting raw binary data into usable input arrays
- Visualized model performance using training curves and confusion matrices

FridgeFinds | Next.js, React, Tailwind CSS, Spoonacular API

Jun. 2025

- Engineered a **full-stack web app** to help users discover recipes based on ingredients they already have
- Integrated Spoonacular API for recipe data, handling secure API key usage and dynamic queries
- Designed responsive UI components using Tailwind CSS with dietary preference filtering
- Built **RESTful API** endpoints to manage complex ingredient-based searches and recipe data
- Implemented a client-side state management system to save user preferences and favorite recipes

AWARDS & LEADERSHIP

Founder, MUIC Hackathon Club

Mahidol University

Jan. 2025

Thailand

- Founded MUIC's first and only Computer Science club to promote hackathon culture and student mentorship
- Organized campus-wide hackathons, workshops, and peer networking events for 150+ active members

Runner-Up, MIT HackMed @ Siriraj

Mahidol University

Nov. 2024

Thailand

- Created an AI-assisted elderly meal planning and catering platform for chronic health conditions
- Led a team to runner-up finish out of 1,000+ global applicants with a tech solution for aging-in-place elders

TECHNICAL SKILLS

Programming Languages: Python, Java, JavaScript, C, Bash/Shell, HTML/CSS, R

Frameworks: React, Node.js, Tailwind CSS, TensorFlow

Developer Tools: Git, Jupyter Notebook, VS Code, PyCharm, IntelliJ, GitHub, Linux, Google Colab, Figma

Libraries: pandas, NumPy, Matplotlib, scikit-learn, Seaborn