



TELMEN BAYARBAATAR

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EDUCATION

University of Maryland

B.S. in Computer Science

College Park, MD

Expected December 2027

- Relevant Coursework: Data Structures & Algorithms, Statistics, Discrete Structures, Computer Systems
- Certifications: Machine Learning Specialization by Stanford, AI4ALL Ignite Fellow, Cognizant-Elevate

EXPERIENCE

iCoSMoS Lab @ University of Maryland

January 2026

Undergraduate Research Assistant (Advisor: Dr. Nirupam Roy)

- Incoming Spring 2026...

Together For You, Inc.

Aug. 2025 - Present

Product Engineering Intern

- Co-led UI/UX design and React Native development for Havii mobile app, from concept to demo-ready application
- Developed 3 core mobile features (onboarding, profiles, notifications) with Redux, React Navigation, and Axios.
- Iterated through 5+ Figma prototypes, achieving 92% positive feedback rate from survey of 200+ students.

Montgomery College

Aug. 2024 – May 2025

Undergraduate Research Assistant (Advisor: Dr. Zhou Dong)

- Developed Nearest-Neighbor-Nim calculator in Java/Javascript, processing 600K+ game configurations states.
- Built recursive MEX algorithm with state-space pruning, achieving 37.5% reduction in redundant computations.
- Identified losing position pattern for 3-vertex graph, presented at 2 conferences and published in CURM report.

TSESSEBE Technologies

Nov. 2024 – Feb. 2025

Software Development Intern

- Enhanced backend APIs and authentication with Express.js, and Firebase Auth, supporting 3k+ workshop users.
- Integrated Stripe API into a RESTful Express backend to support seamless premium workshop payments.
- Used GitLab for version control and CI/CD, contributing to automated testing and smoother release cycles.

PROJECTS

Forkcast.fit - Best in Sustainability | React.js, Express.js, PostgreSQL, Clerk | Dingman Luby Track Pitch Competition'25

- Developed FastAPI pipeline to preprocess over 3M+ rows of historical data, feeding ensemble learning models.
- Integrated BullMQ to offload DB-heavy report generation, reducing API response time from 40s → 200ms.

TDA + N-BEATS Forecasting Model | Python, Pytorch, Ripser, yfinance, Numpy, Pandas, Matplotlib | AI4ALL'25

- Led 5-person team to improve N-BEATS model with Topological Data Analysis, employing persistent homology
- Achieved 8% average error reduction across RMSE, MAE, and MAPE, outperforming baseline architecture

ImageToCalendar | Google Calendar API, OpenAI API, React.js, Node.js, Tesseract.js, Supabase

- Built using Tesseract.js, and OpenAI API to extract event details from JPG or PNG and sync with Google Calendar.
- Integrated Supabase auth with drag-and-drop file upload system featuring OCR and AI-powered data parsing

LEADERSHIP

Raptors Who Code

Nov. 2024 - May 2025

ACM Chapter & Club President

- Hosted MC's inaugural hackathon with 150+ registrations; recognized as The Best Club Event of the Year.
- Organized all aspects of planning, sponsorship outreach, and catering; received a total of \$3,000 in funding.

TECHNICAL SKILLS

Languages: Javascript, Typescript, Python, Java, C/C++, SQL

Tools: Git, Docker, AWS (EC2, S3), Vercel, Figma, Jira, Stripe, Clerk, Firebase, Postman, Jupyter Notebook

DB & Backend Technologies: MongoDB, Node.js, Express.js, PostgreSQL, Prisma, Supabase

Python libraries & Tools: TensorFlow, Pytorch, Ripser, Matplotlib, NumPy, Pandas, ScikitLearn