Matthew Chin

781-697-4238 | matthwchin@proton.me | linkedin.com/in/matthewleechin | github.com/balnc9

EDUCATION

University of Maryland   College Park, MD
Bachelor of Science in Computer Science, Minor in Business   *Jan. 2024 – May 2027*

EXPERIENCE

Undergraduate Data Research Assistant   Feb. 2025 – Present
Digital Media Lab, UMD   *College Park, MD*
- Analyzed digital engagement metrics from local journalism platforms to identify reader behavior patterns.
- Co-developed a news scraping pipeline and Chrome Extension to collect article metadata (word count, headers, images, publish times).
- Designed interactive data visualizations with JavaScript, Chart.js, Next.js, and TypeScript to present trends in engagement and article structure.

Development Intern   Jun. 2025 – Present
Colexia   *New York, NY*
- Built a Python web scraper (BeautifulSoup4) to extract and clean e-commerce product data.
- Modeled scraped data into statistical sheets (e.g., product sizes in stock, item frequency, category trends) for downstream analysis.
- Automated indexing pipelines by integrating Google Sheets + Firebase for structured data storage and accessibility, increasing efficiency by 70%

Helpdesk IT Technician   Aug 2020 – May 2023
Stone Rehabilitation & Senior Living   *Newton Upper Falls, MA*
- Maintained database accuracy for patient records through consistent indexing and entry verification.
- Provided technical support and troubleshooting for healthcare staff to ensure efficient use of IT systems.

PROJECTS

Temperature Time Machine | *Python, Data Science*
- Engineered a full pipeline processing 57,000+ climate records across 155 years from NOAA/NASA datasets.
- Applied data wrangling, regression modeling, and Fourier analysis to quantify climate trends and periodic cycles.
- Developed publication-ready visualizations with matplotlib, including animated time-series climate trend charts.

Smart Story Agent | *Next.js, TypeScript, AI Integration*
- Built a data-driven platform analyzing live news streams using AI-powered content analysis (Claude API).
- Designed engagement scoring metrics and dashboards to visualize article performance in real time.
- Integrated PostHog analytics for behavioral data tracking.

Baltimore Banner Scraper | *JavaScript, HTML, CSS, Chart.js*
- Designed real-time dashboards with Chart.js to visualize differences in news article composition.
- Created a web scraping extension to extract article metadata (word count, headers, publication date, image count).

TECHNICAL SKILLS

Languages: Java, Python, C , (Rust, OCaml, C++)
Frameworks: React, Next.js, React Native, Firebase, Tailwind, Chart.js
Developer Tools: Pandas, NumPy, SciPy, Statsmodels, Matplotlib, Chart.js
Certifications: Tata Cybersecurity Job Simulation, Mastercard Cybersecurity Job Simulation, AWS ML Solutions (Coursera), CompTIA Sec+ (in progress), SEEDLabs PRNG Lab (Ubuntu Linux VM 20.4)
Other: Seal of Bi-literacy (Spanish & English, 2022)
Coursework: Data Structures & Algorithms, Organization of PL's, Computer Systems (C), OOP I/II, Discrete Structures