**Noah Batchelor**

Mailing Address: 8315 Cobblestone, Austin, TX.

Phone: 512-521-2170

Email: noah@batchelorcentral.com | University Email: oldblueeyes@tamu.edu

***Work Experience***

**Imandra – SysML V2 Team Intern**

*Summer 2024 (6/3/2024 to 8/16/2024), Austin, TX / London (Remote Collaboration)*

* Developed a full-stack LLM (Large Language Model) Chatbot application to deliver hallucination-free responses for SysML V2 models, enhancing system usability.
* Utilized Ocaml (functional programming), Reason React, and SysML V2 modeling language for end-to-end development, improving model accuracy and user interaction.
* Coordinated with a London-based team to align project milestones, demonstrating strong project management and cross-time-zone collaboration skills.
* Created presentations and live demos to showcase project progress, leveraging formal methods for system verification.
* Relevant Skills: *Full-stack development, Ocaml, Reason React, SysML V2, project coordination, formal methods, presentation design.*

**Tutor.com – Part-Time Math Tutor**

*Ongoing, Remote*

* Provide one-on-one tutoring for middle and high school students in mathematics, specializing in algebra, geometry, and calculus.
* Adapt teaching methods to individual student needs, improving comprehension and academic performance.
* Relevant Skills: *Problem-solving, communication, mathematics.*

***Education***

**Texas A&M University – Bachelor of Science, Computer Science**

*Graduated: May 2025, College Station, TX*

* GPA: 3.8
* Senior Capstone Project: project manager and developer for Mathematical Animations for the A&M Math Learning Center using the Python animation library software Manim.
* Relevant Coursework: Data Structures & Algorithms (C++), Computer Architecture (x86), Operating Systems (POSIX), Machine Learning (Python/PyTorch), Analysis of Algorithms, Reverse Engineering, Programming Studio (web development), Human-Computer Interaction, Real Analysis, Cryptography, Linear Algebra.

**Regents School of Austin – High School Diploma**

*Graduated: May 2021, Austin, TX*

* GPA: 4.2 | SAT: 1490 | ACT: 34
* Senior Thesis: "Examining the Usage of Critical Theory in Government and Business Policy Making" – Conducted year-long research, wrote a thesis, and defended it in a 40-minute presentation/Q&A session.

***Skills***

* Programming Languages: C++, Python (PyTorch, Django, Manim), Java, JavaScript (Svelte), Haskell, Ocaml, x86 Assembly, MATLAB; exploring Rust, Lisp.
* Tools & Technologies: PostgreSQL, Git, Logisim (digital circuit simulation), Nix, WSL (Ubuntu), MacOS, VirtualBox.
* Development Expertise: Full-stack development, data structure design (Linked Lists, Binary Trees, Hash Tables), algorithm analysis, POSIX systems, CPU simulation.
* Soft Skills: Public speaking, research, technical writing, project coordination, live project demonstrations.

***Relevant Projects***

* CPU Simulation (Y86): Designed and simulated a Y86 CPU’s digital circuitry using Logisim; wrote Y86 assembly code to validate functionality.
* LLM Chatbot (Imandra): Built a hallucination-free chatbot for SysML V2 models using Ocaml and Reason React (Summer 2024 internship).
* Game Development: Created "Back to the Future Hangman", "Hato" (terminal-based text adventure), and a card-based combat game using Python and JavaScript.

***Academic Awards & Honors***

* President’s Endowed Scholarship & National Merit Scholarship (Texas A&M): Awarded for academic excellence (PSAT), requiring a minimum 3.5 GPA.
* Regents Subject Awards: Apostle Paul Awards (AP Calculus, Honors Pre-Calculus, Intro to Programming, Visual Art II, Advanced Algebra II); Simon Peter Awards (Honors Biology, Latin III, Rhetoric I, Biblical Studies).
* National Latin Exam: Silver Maxima Cum Laude (11th), Maxima Cum Laude (8th-10th).
* Scholastic Art & Writing Awards: Gold Key ("Sea Eagle" series, 11th), Silver Key ("Identity Self Portrait," 8th).
* Additional Honors: AP Scholar with Honors, American Mathematics Competition 10 (1st Place), Letter for Honors Art.

***Volunteering***

* Side By Side Kids: Weekly classroom helper aiding children with homework and group activities (discontinued due to COVID-19).
* Vacation Bible School: Assistant group leader at church summer program (ongoing since middle school).
* Pokémon Math Camp: Group leader teaching math concepts through Pokémon gameplay under a calculus instructor.