

Brianna Morgan

Atlanta, GA / Phoenix, AZ — (480) 645-3653 — bmorgan62@gatech.edu

EDUCATION

Georgia Institute of Technology Atlanta, GA
Bachelor of Science in Mathematics — Concentration: Data Science Aug 2025 – Expected May 2027
GPA: 3.86 / 4.00

Relevant Coursework: Advanced Linear Algebra, Multivariable Calculus, Ordinary Differential Equations, Mathematical Proofs, Object-Oriented Programming, Putnam Mathematics Seminar

Desert Vista High School Phoenix, AZ
High School Diploma Graduated May 2025
GPA: 4.00 Unweighted , 4.96 Weighted — **ACT:** 36

RESEARCH EXPERIENCE

Undergraduate Researcher (Complex Analysis) — *Georgia Tech* Jan 2026 – May 2026

- Conducted mathematical research in complex analysis with mentor Lewis McGoldrick via the Directed Reading Program.
- Authored and delivered formal technical presentations on stereographic projection, infinite descent methodologies, and their structural utility in proofs surrounding Fermat's Last Theorem.

Undergraduate Researcher (Topological Exploration) — *Georgia Tech* Aug 2025 – Dec 2025

- Performed directed research in low-dimensional topology and knot theory with mentor Sierra Knavel.
- Investigated mathematical representations of knot untangling and presented comparative analyses linking topological invariants to the enzymatic mechanisms of DNA topoisomerase.

Research Assistant (CS Education) — *Georgia Tech* June 2025 – Dec 2025

- Collaborated on statistical analysis and equity research under Dr. Betsy DiSalvo.
- Synthesized and evaluated over 20 literature reviews analyzing systemic disparities, educational outcomes, and pedagogical interventions in STEM.

TECHNICAL & INDUSTRY EXPERIENCE

Data Analytics Intern — *Rosendin Electric, Phoenix, AZ* May 2026 – Present

- Engineered and deployed 10+ enterprise software and data applications using Python, Power BI, and Cursor to streamline business operations and analytics workflows.
- Executed technical demonstrations and delivered data-driven strategy presentations to senior executive leadership to drive adoption.

Grand Challenges LLC Coach & Project Lead — *Georgia Tech* Aug 2025 – Present

- Mentoring a multidisciplinary team of 4-5 undergraduate students within a specialized innovation and entrepreneurial curriculum.
- Spearheaded the design and development of *Sprouta* (2025–2026), an RPG-based educational web application for 3rd–6th graders utilizing LLM-based communication architectures with strict safety guardrails.

AWARDS & COMPETITIVE ACHIEVEMENTS

- **InVenture Prize Competition Participant (2026):** Collaborated with an engineering and design team developing CAD and PCB prototypes. Developed *Rumo*, a modular educational robot.
- **William Lowell Putnam Mathematical Competition (2025):** Participant in the national collegiate mathematics competition.
- **High School Valedictorian (2025):** Graduated 1st in class at Desert Vista High School.
- **American Mathematics Competitions (AMC) & State Math Competition (SMC):** Ranked Top 20 schoolwide.
- **Desert Vista High School Geometry Competition (2023):** 1st Place Winner.

TECHNICAL SKILLS & TOOLING

- **Languages:** Python, Java, C++, L^AT_EX, SQL, HTML/CSS, C#
- **Data Science & Tools:** Power BI, Cursor, Object-Oriented Design, Statistical Data Analysis, Git
- **Frameworks:** React, Node.js, Rest APIs, Spring Boot. EF Core
- **Spoken Languages:** English (Native), Mandarin Chinese (Intermediate), German (Elementary)