Example of STEM, Tech, Coding

KAI BOBCAT

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EDUCATION

Bates College – Lewiston, ME May 2026
Bachelor of Arts, Major: Physics and Digital Computational Studies | GPA: 3.7

Winged Beaver Preparatory Academy, Buena Vista, CO 2022
High School Diploma | GPA: 3.74/4.00

TECHNOLOGY EXPERIENCE

Equb Finance – *Founder & Full Stack Developer* March 2024 - Present
- Created a peer-to-peer banking application using Django, enabling users to directly save and borrow
- Designed and implemented PostgreSQL relational database models, managing financial transactions with asynchronous processes
- Developed responsive web interface with jQuery and built cross-platform mobile apps (IOS/Android) using Flutter
- Streamline backend deployment by automating a Ci/CD pipeline

Social Progress Imperative – *Freelance Data Analyst* July 2023 - Nov 2023
- Analyzed vast datasets on international trade to develop a COVID-19 Trade Vulnerability Index
- Built a Python-based statistical model in Pandas to detect reduction in trade volume due to the pandemic
- Created interactive world map, dynamically visualizing countries' trade risks through color-coded analytics

Bates College – *UX Researcher and App Coordinator, Office of Campus Life* March 2021 - Present
- Led user testing and focus groups to refine Bates' community events app, enhancing the user experience
- Presented data-driven insights to college administration, driving a 60% increase in app engagement within 3 months
- Coordinate app content updates to ensure relevance and optimize user interactions

Bates Gravity and Geometry Group – *Researcher* June 2022 - June 2023
- Coauthored physics research paper exploring geometrical alternative to Einstein's theory of general relativity

CODING PROJECTS

Scalar Field Analysis August - November 2024
- Conducted numerical simulations of differential equations to visualize the behavior of the Inflation field in early university cosmology

Two-Dimensional Virtual Space December - March 2024
- Developed a Python-based virtual environment modeling colliding objects using Newton's laws of motion

CAMPUS INVOLVEMENT

Academic Resource Center (ARC) – *Tutor* August 2024 - Present
- Tutor approximately 10 students per week in subject areas of geometry, economics, and physics

Africana Club – *Member* September 2024 - Present
- Participate in meaningful restorative anti-racism dialogue within the local community

Bates Outing Club – *Member* October 2023 - Present
- Participate in student-led expeditions including surfing, rock climbing, and biking

SKILLS

Programming languages: Proficient with Python, JavaScript, C++, Dart, HTML/CSS, Java, VB.net
Data Analysis & Visualization: Mathematica, Excel, Pandas, NumPy, STATA, d3.js, R, GitHub
Tools and Systems: Docker, Django, Flutter, React, Electron, Heroku, AWS, Linux