Career Goals and Research Interests

Main Career Goals:

- Utilize thermoelectric properties of certain materials to make use of waste heat in electrical systems
- Increase global internet accessibility by reducing power consumption of electronic devices

Other Career Goals:

- Contribute to finding a solution to the P vs. NP problem using quantum computing methods
- Create heuristic algorithms that are both fast in runtime and thorough in evaluating solutions
- Supervise safe and ethical development of AI and complex machine learning

STEM Areas of Interest:

- Engineering - Computer Science Engineering/Information Technology
- Engineering - Electrical Engineering
- Biomedical Sciences - Learning & Memory/Psychiatry & Human Behavior

Research Interests:

- Thermoelectric effects, particularly the Seebeck effect
- Software development/computer architecture
- Power generation and consumption
- AI and Internet of Things
- Mental illness, particularly depression in adolescents and adults

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