# **Keshav Anand**

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#### Education

#### Plano East Senior High School, Plano

August 2023 - May 2027

STEM and Multidisciplinary Endorsement

- ∘ GPA: 4.73/4.0 (View Unnoficial Transcript 🗹)
- Class Rank: 1/1273
- Current Coursework: AP Chemistry, American Studies (AP US History + AP English Language), Digital Electronics, AP Physics I, Calculus III (via Collin College)
- SAT: 1550/1600 Reading 760/800, Maths 790/800

## Key Projects and Work

#### TEG Powered Self-Stirring Device (2023-2024)

Project Portfolio 🗹

• Built novel prototype to harvest thermal energy for automatic stirring while cooking

### GaitGuardian: IMU Processing for Parkinson's Disease (2024-Present)

Project Portfolio

- Constructed novel hybrid biLSTM + CNN architecture for Freezing of Gait prediction
- o Signal processing and segmentation to reduce subject-dependence
- State-of-the-art metric performance while being end-to-end functional

### FTC Technical Turbulence Lead Software Developer (2023-Present)

2024-25 Github Repo **∠** 

- o Custom inverse kinematics pathing and Computer Vision for Autonomous Navigation
- o World top-30 FTC team for autonomous software, FTC State Finalist

#### Awards and Honors

### Thermoelectric Generator Research Project

2024

- o Dallas Fair: 1st in Engineering, US Air Force Recognition, USMA Best SI Units
- o International Science and Engineering Fair (ISEF) Finalist

#### GaitGuardian: ML and Signal Processing for PD Research

2025

- o Dallas Fair: 1st in Systems Software, Grand Prize Runner-Up, TI Best Computing Project 2nd
- ISEF Finalist, ISEF 3rd in Robotics and Intelligent Systems (\$1200)

FTC Technical Turbulence, State Division Finalist, Innovate Award Winner

2024

National Speech & Debate Impromptu Quarterfinalist, State Quarterfinalist

2025

## Other Activities

Vice President, LASER: Guiding and instructing 120+ students for Science Fair

Founder, Cricket Club: Former USA U15 Cricketer → Formed Plano East's first cricket team

Technology Officer, NHS: Coded and maintained React-based portal for largest NHS chapter in the US

Indian Film Music: Bass Guitar, Keyboard, and Arrangement. Live concerts with profits going to charity

## Skills

Programming Languages: Java, Python, Bash, C++ (Arduino), Kotlin (FTC), Limited HTML, JS, CSS

**Programming Applications:** Machine Learning, Signal Processing, Tensor Flow, Computer Vision

Miscellaneous: Public Speaking, CAD, PCB Design, Electrical, Competition Math