Inesh Gupta

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EDUCATION

University of California, Berkeley May 2028
B.A. in Computer Science *CS Scholar | GPA: 3.825*
Relevant Coursework: Structure and Interpretation of Computer Programs, Linear Algebra and Differential Equations, Data Structures, Optimization Models in Engineering, Discrete Mathematics and Probability Theory, Internet Architecture

EXPERIENCE

Formula Electric at Berkeley Berkeley, CA
Firmware Engineer Sep 2025 – Present
- I am working on firmware BMS, Dashboard, and LVPDE using freeRTOS and C to implement parallel processing of various checks between multiple communication protocols (CAN, I2C, and SPI) in order to successfully account for important faults/failures

Stooping Club Berkeley Berkeley, CA
Cofounder and CTO of Berkeley Branch Sep 2025 – Present
- Secured funding for our organization ($5,000 and counting) through grants, etc. in order to continue diverting usable resources from landfills and distributing it through our 100% free online store (Launching app which uses Expo (React Native framework))

George Mason University's Aspiring Scientists Summer Internship Fairfax, VA
Research Intern June 2024 – Aug 2024
- Developed an open-world virtual reality game prototype using Unity to gamify learning American Sign Language and make it accessible to people with disabilities (such has impaired hearing); Our abstract is published in George Mason University's Journal of Student-Scientists' Research; Our working paper is published in the research repository of the Berlin School of Economics and Law
- Received a 3.5/5 overall rating in the Serious Games Competition section of the Games and Learning Alliance (GALA) Conference in Berlin by the Serious Games Institute; Presented our research and game prototype with Meta Quest at annual ARTS by *George*! Event.

PROJECTS

- Worldcraft: Used Python and Amulet Core (switched to Litematica) to take in voxels, downscale them, and generate a Minecraft world based on those voxels. Our product processes images from online to render a virtual image that is then converted to a Minecraft world
- Ecosim: Used Javascript (chart.js and 3.js) and Python for the frontend and backend (respectively) of a simulation of a perfect economy, allowing users to see decisions made by agents (my team and I developed household, government, and business agents)
- Used R, Python with Pandas, MatPlotLib, and sklearn to analyze data on Spotify music trends and develop/test a prediction model
- 2D, 3D, and VR games developed in Unity and IntelliJ (C# and Java, respectively) like Frogger, Wumpus World, and original games

ACTIVITIES

Gamelan Project Berkeley, CA
Researcher Feb 2026 – Present
- Working with Professor George Anwar to design a system that animates wayangs (Indonesian puppets) to play Gamelans (percussion instrument). I will pursue development of a model that can adapt Western music into Indonesian notes and read sheet music.

Combat Robotics at Berkeley Berkeley, CA
Technical Design Sep 2025 – Dec 2025
- Designed and modeled a plastic one lb robot with a horizontal spinning weapon utilizing Onshape and engineering design principles

Technology Student Association Katy, TX
Chief Technology Officer, Vice President, Voting Delegate Aug 2021 – May 2025
- Improved efficiency of the club that scaled 10x the size it was the previous year, allowing us to help 200+ members input their events
- Drone Challenge National Semifinalist; Engineering Design, Biotechnology Design, Technology Problem Solving - National Qualifier

Robotics (FIRST and Vex) Katy, TX
Technical Design Lead, Team Captain Aug 2021 – May 2025
- Trained 200+ members in Onshape to strengthen weakest subteam → 1st in state and Worlds qualifier (first time ever for my school)
- Team captain of Vex team whose club has gone to Worlds every year; Creativity Award and All-Star Rookie regional awards

International Robotics Honor Society Katy, TX
Founder and President of Jordan Chapter Aug 2023 – May 2025
- Worked with principal, CTE Department Chair, computer science teachers, engineering teachers, and school district to establish
- First chapter in the Greater Houston Area; a step towards greater robotics recognition and engagement. 100+ applicants first year

Teach Her Today (Nonprofit Organization) Katy, TX
Volunteer 2022 – 2023
- My team and I helped THT partner with Google, expand to 6 different countries (I worked with people as far away as Poland and India), host a Computer Science Research Competition with Youth Inventa, conduct its first online kit shipment to Kaduna, Nigeria with Purple Silver Community, and publish three magazines in 3 months; received the Gold Presidential Volunteer Service Award

SKILLS

Certifications: Information Technology Specialist in Java, Autodesk Certified User: AutoCAD®, Autodesk Certified User: Inventor®, Unity Certified User: Programmer, AWS Certified Cloud Practitioner