

# Sai Praneth Raju Kanchanapalli

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## Education

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**University of California, Berkeley:** B.A. Astrophysics; Minor: Computer Science

**Coursework:** Structures & Interpretation of Programs, Data Structures & Algorithms, Discrete Math & Probability Theory, Abstract Linear Algebra & Multivariable Calculus, Classical Mechanics, Introductory Relativity, Electromagnetism, Waves, Quantum Physics.

## Work Experience

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### Jadoo Technologies - Undergraduate Research Apprentice

2023-Present, Berkeley CA

- Global startup-company based on breakthroughs in Nanotechnology, consisting of programmable array of carbon nanotubes
- Research apprentice at JT, working on server-side communication, data analysis and UI development.

### EE198 (PCB Engineering) - Course Staff

2024 - Present, Berkeley, CA

- Present lectures on PCB engineering, covering optimal schematics, layouts, design principles and manufacturing process.
- Coordinated outreach initiatives, including guest speakers from industry and collaboration with local community college through workshops and competition support in PCB Design.

## Projects & Extracurriculars

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### Berke1337 - Cyber Security Club

2023-Present, Berkeley, CA

- Participated in CTF challenges, workshops & sessions on penetration testing, cryptography, and exploit development.
- Competed in the National Cyber League (NCL) in 2023 & 2024 placing top 200 at 96 percentile for individual game and 14th at 99 percentile for team game; Cyber Defense Competition (CCDC) in 2025 placing top 10 for Regionals.

### Space Enterprise at Berkeley (SEB) - Avionics Developer

2023-2025, Berkeley, CA

- Inducted into SEB to improve rocket's RF communication to support reliable video streaming and telemetry during flights.
- Previously a member of STAR (Space Technologies And Rocketry), where I worked on the rocket's communication system with its ground system for the club's first Liquid-Engine rocket.

### Personal Projects - Application Developer

2019-Present, Berkeley, WA

- **Stock-Bot:** Developed an LSTM-based algorithm with 73% accuracy, simulating a \$175 profit from a \$10K investment.
- **Cyber Security:** Built a python server-client communication system from network nodes for remote execution
- **AevumCoin:** Created a Java-based cryptocurrency with blockchain validity, mining rewards, and ECDSA encryption.
- **PhantomGambit:** Prototyped a self moving chess board with PCB and fabrication for automated piece movement.
- **Hope (IEEE):** Built a light sensor, usb charger and car shifting lights, including the schematic and layout.

### Inspirit AI: Understanding SIRI - Summer Internship

Summer 2022, Seattle, WA

- Developer proficiency in Machine Learning algorithms including linear/logistic regression, LSTM and NLP techniques.
- Created an Alexa-like prototype using the BERT model, achieving 98% accuracy in natural language understanding. Awarded "Best Project Presentation" out of nine teams for exceptional work on the prototype.

### Vonette Schools Mobile App - Lead Developer & CTO

2021-23, Seattle, WA

- Developed a cost-effective mobile collaboration platform for students and clubs aimed to replace previously licensed tools.
- Lead a team of three developers in building the app and ensuring a timely launch over a year long development process.

### [CuriousAvenger.net](https://CuriousAvenger.net) - Personal Website & Blogs

2017-Present, Seattle, WA

- Website of personal musings, projects and a portfolio of work in various fields, including programming and astrophysics.
- Published blogs simplifying astrophysics concepts like Quantum Physics through blogs like Quantum Tennis, Teleportation, Quantum Field Theory, and Higgs Boson. Content reviewed by subject matter experts for credibility.

## Skill & Interests

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Programming Frameworks: Python, Java, Javascript, C, C++, SQL, React-Native, AWS, Firebase, Keras Modules, KiCAD

Cybersecurity: Wireshark, Burp Suite, Metasploit, Fuzzing, Hashcat, Networking Scanning, Bash Scripting.

Misc: Tennis - USTA & Varsity member, ranked #2 in Singles & #1 Doubles (High School) with MVP honors. UTR: 5-6