Sai Praneth Raju Kanchanapalli

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Education

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

Jadoo Technologies - ***Undergraduate Research Apprentice*** ***2023-Present, Berkeley CA***

- Global startup-company based on breakthroughs in Nanotechnology, consisting of programmably 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

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 - ***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

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