Arjun Vaish

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EDUCATION

University of Washington, Seattle (UW)   Expected Graduation June 2026
B.S. in Electrical and Computer Engineering, Junior
Minor: Computational Finance and Risk Management

Awards: Recognized by the **Computational Finance** department for contributions to the Algorithmic Trading club's portfolio management and innovative trading strategies (2024), ranked 3rd out of 93 teams in the **AIAA Design Build Fly Competition** (2023), Finalist in **NASA**'s International Space Settlement Design Competition (2022). Awarded Rookie Game Changer Award **FIRST** Robotics Competition (2022).

ACTIVITIES & EXPERIENCE

Chief Trading Officer | Algorithmic Trading Club | UW   March 2024 – Present
- Secured a strategic **industry partnership with QuantConnect**; organized guest talks with professionals from Jane Street on **probability theory, high-frequency trading strategies, and market making**.
- Manage a **$10,000 long/short equity portfolio** utilizing leveraged options strategies (2:1 spreads) to optimize low-risk, high-reward trades while maintaining **low-beta exposure**.
- Lead portfolio rebalancing and fund allocation decisions, ensuring alignment with the club's **investment mandate** and risk management protocols.

Research Associate | Sensors, Energy, and Automation Laboratory | UW   September 2023-November 2023
- Developed and maintained dynamic web applications using **React and MongoDB** to facilitate the distribution of research on sensor technologies and energy systems.
- Integrated real-time sensor data into web applications, offering researchers up-to-date visualizations and analytics, thereby reducing data processing time by 3 hours per week.

Full Stack Engineering Intern | Pan Communications | New Delhi   June 2023 – August 2023
- Extracted and analyzed database data utilizing **Python and Pandas**, then effectively presented results to board members and directors with enhanced styling and formatting using **CSS**.
- Collaborated with cross-functional teams to design, implement, and test new **Three.js** features for web applications.
- Assisted in optimizing website performance, resulting in a reduction of load times from 2 to 0.4 seconds.

PERSONAL PROJECTS

3D Marble Race Game using Three.js and ReactJS   June 2024 – July 2024
- Developed a 3D marble race game using **React-three-fiber** and **WebGL** to create an engaging interactive experience.
- Implemented complex game mechanics such as marble physics, obstacle interactions, and real-time score tracking.
- Enhanced user experience with responsive controls and intuitive gameplay, resulting in an average of 50 daily visitors and increasing engagement by 40%.

Website on Advanced Option Strategies with Real-Time Market Analysis   March 2024 – April 2024
- Developed a website using **ReactJS** and **Django** on advanced options trading strategies, and trade idea generation.
- Integrated **Trading View** widgets for real-time market analysis, increasing the average session duration from 2 to 5 minutes.

ADDITIONAL INFORMATION

Languages: English (fluent), Hindi (fluent)
Sports: Basketball (high school senior team)
Computer: Proficient in Excel and PowerPoint
Interests: Formula 1, Options Trading, Long Short Equity Funds, Calisthenics
Certifications: Bloomberg Market Concepts
Additional Education: National University of Singapore, Summer School (2019)