Jinsung Kim

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Projects & Experience

UNVEIL WAVE THEORY | PANDAS, NUMPY, SCIPY, MATPLOTLIB | JUN. 2024 – AUG. 2024 | [VIEW PROJECT]

- Conducted a statistical test on a hypothesis derived from Elliott Wave Theory to examine its validity in Bitcoin hourly price movements.
- Utilized block sampling and stratified random sampling to ensure unbiased data collection.
- Applied paired sample t-test to compare the highest values of the first and third motive waves.
- Developed wave detection algorithm, highlighted challenges with inherent look-ahead bias in back-testing wave data and implemented a trading strategy to avoid look-ahead bias.
- Authored a comprehensive report detailing the methodology, results, conclusions, and significant findings.

DEMYSTIFY DOJI CANDLESTICK | PANDAS, MATPLOTLIB | DEC. 2023 – JAN. 2024 | [VIEW PROJECT]

- Utilized linear regression and statistical analysis to quantify stock price trends and patterns, particularly analyzing Doji candlestick formations to identify trend reversals.
- Leveraged Python, pandas, and matplotlib to automate the entire data processing pipeline from importing and cleaning to visualizing trends and saving detailed comprehensive reports.

PORTFOLIO WEBSITE | HTML, CSS, JAVASCRIPT | JUN. 2023 | [VIEW PROJECT]

- Strengthened responsive design, and flexbox skills in CSS, and JavaScript DOM manipulation within Web API by creating a creative portfolio website modeled after the MacOS environment, which includes drag & drop.
- Implemented best coding practices including the avoidance of global queries and the use of class manipulation instead of inline styles for improved readability and maintainability.

MICROSOFT PYGAMES HACKATHON | PYTHON, PYGAME | MAR. 2023 – APR. 2023 | [VIEW PROJECT]

- Developed a game with Python, applying both functional programming and object-oriented programming (OOP) to ensure efficient and maintainable code.
- Managed and parsed game data by storing level configurations in an external JSON file, and loading them back into the game, allowing for seamless adjustments to game settings, and improved maintainability.
- Implemented error handling and file checking using try-except blocks to ensure the game runs smoothly and can adapt to missing or improperly formatted data files.
- Utilized a hash map for game elements, allowing for easy modification and fast look-ups.
- Refactored code from a 6-month-old project. Focused on code readability and maintainability by implementing a question, 'Will I be able to understand it in 6 months?'

Education

UNIVERSITY OF THE PEOPLE **EXPECTED GRADUATION: JUN.2026**

B.S. in Computer Science *Cumulative GPA: 3.5/4.0*

Relevant Coursework: Introduction to Statistics, Statistical Inference, Calculus, College Algebra, Data Structures, Algorithms, Object Oriented Programming, Introduction to Economics, Databases

Skills

Languages: Python, R, JavaScript, Java, HTML, CSS, MySQL

Technologies/Frameworks: Linux, Unix, Git, GitHub, AWS, Django, REST API, Postman, Bootstrap, Mocha, NPM, PIP, Tableau

Certificate: Google Data Analytics Professional Certificate – **[VIEW CERTIFICATE]**