Sabyasachi Purkayastha

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Education

The University of Hong Kong, Bachelor of Engineering.

Hong Kong, SAR

Class of 2024.

Major: Computer Science, Minor: Finance, Focus: Financial Computing.

Awards: HKU Foundation Entrance Scholarship (Full Tuition).

Roles: Co-President UNICEF HKU, HKU Student Ambassador, HKU Equal Opportunity Ambassador.

Highlight Courses: DSA, Discrete Mathematics, Computer Organization, OOP & Java, Modern Technologies on World Wide Web, Artificial

Intelligence: Utopia or Dystopia.

Work Experience

GrinBean Limited, Full Stack Developer.

Dec 2021 - Jan 2022.

- **Recreated** the legacy UI system using Vue and subsequently enhanced UX through redesigning the dashboard using Chart.js for dataanalytics and visualisation.
- Seamlessly developed data pipeline for IoT device and server using Express.
- Contributed to the text-based data mining and information extraction to train and modify the data driven AI model to achieve greater efficiency.

HKU Business School, Research Assistant.

Nov 2021 - Jan 2022.

- Build a dataset of filings from the SEC Edgar database used in the project regarding Industrial Organization and Supple Chain Risk.
- Increased the speed of data extraction by 60% via implementing an algorithm that recognised the type of data required and instantly provided that for the project, saving multiple hours in the process.

QuokkaHR, Software Developer.

Nov 2021 - Dec 2021.

- Designed and developed features using React to show attempts of team members so they can analyse their weaknesses.
- Revamped the project page using React to aid project managers differentiate between completed and incomplete assignments.
- Wrote tests for authentication, authorisation, and performed UAT to optimise the performance of the existing platform.

Highlight Projects

See more at <u>Shoh4g.github.io</u>

EXIT-Finder, a mobile app for the visually impaired community to help navigate their way in the MTR station.

- Designed the front-end of the app using React Native Paper to enhance interactivity and optimised code base for greater efficiency.
- Implemented React Native async storage and expo speech to further make the app user friendly for the visually impaired.
- Collaborated with my team to implement an algorithm to traverse a map of an MTR Exits to find the shortest path using graph representation and concepts such as Breath-First Search, Dijkstra's algorithm, and A-Star Search. View the project.

COVID-19 Stats Portal, a platform showing real time Covid-19 statistics across the globe using graphs and maps.

- Created using the open API disease.sh and made use of advanced React concepts such as React-leaflet.
- Revamped the platform using Chart.js and Material UI to enhance interactivity. View the project..

Crypto Verse, A fully responsive and functional cryptocurrency tracker app.

- Developed using React and instrumented advanced concepts such as React hooks, Material UI and Chart.js
- Integrated Context API to manage the state of the app and Coin Gecko API for the relevant data. View the project.

Sort-It, A Sorting Visualiser.

• Demonstrated with the aid of visualisation, how different Sorting Algorithms work behind the scenes. View the project.

Notable Awards and Certifications

HKU Foundation Scholarship, Full Tuition.

Scholarship covering Full Tuition for the entire study period.

HKU 3rd Engineering Inno-Show 2020, Runner - Up.

Developed an interactive game called Play2Study that uses gamification and is targeted towards HKDSE candidates. <u>Click here to learn more.</u>

JP Morgan Chase, *Finance for Non-Finance program*.

Selected among 45 individuals from APAC region to complete a 2-week Finance training program under the guidance of JP Morgan associates.

Finance Accelerator Simulation 2022, AmplifyMe in partnership with Morgan Stanley.

Ranked 2nd in the entire competition, plus developed a deeper understanding of the intricacies between the buy-side and the sell side.

GOLDMAN SACHS, Engineering Virtual program.

Used Kali Linux and Hash cat to crack a leaked password database which was using Secure Hash algorithm (SHA) and Message Digest (MD5).

JP MORGAN CHASE and CO, Software Engineering Virtual Experience.

Used React to create an interface with a stock price data feed and displayed data visually to traders.

Edexcel Higher Achiever's Award, Top 113 out of ~230,000 Students Nationwide.

For outstanding academic achievement in A' Level Examinations (4 A*) and IGCSEs Examinations (7A*).

Skills

Core: Python, JavaScript, Java, C/C++, Shell, Linux.

Skills: HTML5, CSS3, jQuery, React, React Native, Vue, Chart.js | Node.js & Express | MongoDB.