#### Sabyasachi Purkayastha

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#### Education

#### The University of Hong Kong, Bachelor of Engineering.

Hong Kong SAR

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

Class of 2024

Awards: HKU Foundation Entrance Scholarship (Full Tuition).

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

**Highlight Courses:** Data Structures and Algorithms, 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 data analytics and visualization.
- 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 research regarding Industrial Organization and Supple Chain Risk.
- Increased the speed of data extraction by 60% via implementing an algorithm that recognized 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* 

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

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

# Highlight Projects MTR-Finder, ongoing project for the visually impaired community to help navigate their way in the MTR station.

• Designing the front-end of the app using JavaScript, React Native and its exclusive design components.

• Collaborated with peer developer to implement an algorithm to traverse a map of a 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 stats 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 Chartis and Material UI to enhance interactivity. View the project..

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

- **Developed** using React JS, 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 Visualizer.

• Demonstrated with the aid of visualization, how different sorting algorithms work behind the scenes. <u>View the project.</u>

## Notable Awards and Certifications

#### HKU Foundation Scholarship, Full tuition.

Scholarship covering full tuition for entire study period.

# HKU 3<sup>rd</sup> Engineering Inno-Show 2021, Runner - Up.

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

JPMorgan 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 JPMorgan associates.

#### GOLDMAN SACHS, Engineering Virtual Program.

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

#### JPMORGAN 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\*).

# Certificate Of Recognition, Ministry of Environment, Forest, and Climate Change of the People's Republic of Bangladesh.

For conducting multiple impactful activities regarding climate change and global warming.

# Skills

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

Web & Database: HTML5, CSS3, jQuery, React, React Native, Vue, Chartis | NodeJS & Express | MongoDB, Mongoose, SQL.