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*

- **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   *See more at Shoh4g.github.io*

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 Chartjs 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. *View the project.*

Notable Awards and Certifications

HKU Foundation Scholarship, *Full tuition.*

Scholarship covering full tuition for 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. 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, Chartjs	NodeJS & Express	MongoDB, Mongoose, SQL.