

<a href="mailto:u3572970@connect.hku.hk">u3572970@connect.hku.hk</a>	<b>Sabyasachi Purkayastha</b>	<b>+852 5697 0024</b>
EDUCATION		
<b>Pok Fu Lam, Hong Kong</b>	<b>The University of Hong Kong</b>	<b>September 2020 – Present</b>
<ul style="list-style-type: none"> <li>Sophomore, Bachelor of Engineering, <b>Major CS and Minor Finance</b>, - <b>Full Scholarship</b> for 4 Years</li> </ul>		
<b>Sylhet, Bangladesh</b>	<b>Anandaniketan</b>	<b>August 2017 – June 2019</b>
<ul style="list-style-type: none"> <li>Completed A'Levels with <b>4 A*</b> in <b>Physics, Chemistry, Mathematics</b> and <b>Further Mathematics</b></li> </ul>		
HIGHLIGHT PROJECTS		<a href="https://github.com/Shoh4g">https://github.com/Shoh4g</a>
<p><b>Play2Learn</b> An educational based text game using C++. Included a few rounds of healing mechanism called lucky-dice along with a round of rapid-fire questions .</p> <ul style="list-style-type: none"> <li>Used Dynamic Memory management to display questions in the rapid-fire round based on user input.</li> <li>Allowed users to load previous data using File I/O.</li> <li>Created a Make File to organize code compilation and increase efficiency.</li> </ul> <p><b>BIGTWO</b> A card game called BigTwo made in JAVA with multiplayer support on the network.</p> <ul style="list-style-type: none"> <li>OOP approach to handle complex game mechanisms and rules.</li> <li>JAVA GUI for the client.</li> <li>Proper use of exceptions for error handling.</li> <li>Multi-threaded approach to handle networking.Java sockets to handle network multiplayer.</li> </ul> <p><b>NOTAKTO AI</b></p> <ul style="list-style-type: none"> <li>An AI implemented using python that analyzes every move of the User (opponent) and plays it's move accordingly such that it's impossible to beat the AI.</li> </ul>		
EMPLOYMENT		
<b>Full Stack Developer</b>	<b>GrinBean Limited, HongKong</b>	<b>December 2021-January 2022</b>
<ul style="list-style-type: none"> <li><b>Recreated</b> the legacy UI system using VUE.js and subsequently enhanced UX through redesigning the dashboard using chart.js for data analytics and visualization.</li> <li><b>Seamlessly</b> developed data pipeline for iot device &amp; server using Koa JS.</li> <li><b>Contributed</b> to text-based data mining and information extraction to train and modify the data driven AI model to achieve less recourse and greater efficiency.</li> </ul>		
<b>Software Developer</b>	<b>QuokkaHR, HongKong</b>	<b>November 2021- December 2021</b>
<ul style="list-style-type: none"> <li><b>Designed and developed</b> features using VUE.js and Typescript to show attempts of team members so they can analyze their weaknesses.</li> <li><b>Revamped</b> the main page containing all available projects using jQuery to help project managers differentiate completed projects from the incomplete ones.</li> <li><b>Wrote tests</b> for authentication, authorization and output for the above and performed UAT to optimize performance for existing the platform.</li> </ul>		
<b>Research Assistant</b>	<b>The University of Hong Kong</b>	<b>November 2021 - January 2022</b>
<ul style="list-style-type: none"> <li><b>Conducted analyses</b> of datasets regarding a research paper of machine learning by HKU business school</li> <li><b>Substantially increased</b> the speed of data extraction by implementing an algorithm that recognized the type of data required and automatically provided that for the research project.</li> </ul>		
<b>Technology Instructor</b>	<b>BSD education, HongKong</b>	<b>June 2021 - August 2021</b>
<ul style="list-style-type: none"> <li><b>Collaborated</b> with a group of instructors to create a practical introductory course on Machine Learning using Python.</li> <li><b>Instructed</b> numerous classes that ranged from elementary programming lessons to in depth courses that iterated through important AI concepts and algorithms.</li> </ul>		
SKILLS		
<ul style="list-style-type: none"> <li><b>Programming languages and core:</b> Java, Python, JavaScript, TypeScript, C/C++, Shell(Scripting), Hashcat, Linux/UNIX/Kali Linux</li> <li><b>Web Development:</b> HTML5, CSS3, VUEJS, EJS, chart.js, jQuery, NodeJS, ExpressJS, KoaJS, SQL, MongoDB, Mongoose, GraphQL</li> <li><b>Machine Learning:</b> Regression, Classification, Clustering, NLP, Apriori Algorithm</li> </ul>		
ADDITIONAL EXPERIENCE AND AWARDS		
<ul style="list-style-type: none"> <li><b>GOLDMAN SACHS Engineering Virtual Program:</b> Using Kali Linux and Hashcat, cracked leaked password database which were using Secure Hash Algorithm (SHA) and Message Digest(MD5)</li> <li><b>JPMORGAN CHASE &amp; CO Software Engineering Virtual Experience:</b> Build an interface with a stock price data feed and display data visually for traders.</li> <li><b>University of Hong Kong Entrance Scholarship</b> Full tuition for the entire study duration.</li> <li><b>The Edexcel Higher Achievers Award &amp; The Daily Star Award</b> Award that recognizes academic excellence for A'Levels and IGCSEs.</li> <li><b>Certificate of recognition</b> from the Mayor's Office for humanitarian works.</li> <li><b>Certificate of recognition</b> from the Ministry of Environment, Forest, and Climate Change of the People's Republic of Bangladesh for conducting activities regarding <i>Environment Conservation and Climate Change</i>.</li> <li><b>Co-President of UNICEF HKU</b> Representing UNICEF at HKU, to advocate for the wellbeing and equal rights of every child. Leading fundraising and educational activities on campus.</li> <li><b>Equal Opportunity Student Ambassador</b> contributing to the general well-being of the student community in the University, and the society in general in respect of equity, diversity and inclusiveness.</li> <li><b>HKU Student Ambassador.</b></li> </ul>		
INITIATIVES		
<ul style="list-style-type: none"> <li><b>Founder of "Welfare for All" and "Anandaniketan Earth Club",</b> both of which have the vision of encouraging a brighter future for the country.</li> <li><b>Youth in Action</b> during the dengue epidemic in Bangladesh, visited the slums of Sylhet and Rohingya camp in Chittagong to raise awareness of how dengue virus spreads.</li> <li><b>Pledge4Change</b> provided sewing machines and a rent-free premise allowing a group of underprivileged people to create a sustainable income source for themselves.</li> </ul>		