JAYATI SARKAR

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EDUCATION

Imperial College London, UK - Computing (MEng)   *October 2016 - Present*
- On track for a First Class Honours
- Elected DoCSoc (Imperial College Computing Society) Social Events Coordinator 2018-19
- Entrance Scholarship, awarded to 10 students, at the beginning of first year

Gems Modern Academy - Dubai, UAE   *2012 - 2016*
- ISC Board Examinations (Grade 12) - 97.5%
- ICSE Board Examinations (Grade 10) - 97%
- KS Varkey Merit Scholarship, a 50% scholarship, for Grades 11 and 12

INDUSTRIAL EXPERIENCE

Microsoft   *April 2019 - September 2019*
Software Engineering Intern
- Currently working on multiple features to improve the user experience of Cortana on the new version of Windows, using C# and XAML.

Morgan Stanley   *June 2018 - August 2018*
Summer Technology Analyst
- Designed and developed a continuous integration and delivery pipeline with AxiomSL (financial regulatory reporting tool).
- Worked on combining the Jira Project Tracking API with version control, using Python and SQL, to promote agile software development in the team.

Eko India Financial Services   *July 2017 - August 2017*
Software Engineering Intern
- Worked at a financial-tech startup on the automation testing of their RESTful APIs that return responses in JSON format.
- Implemented unit testing of the MySQL database using JDBC and Mockito.

PROJECTS

Edward.AI   *React JS, Flask, Keras, Gunicorn, Memcached, MySQL, Git*
- Developed an online digital assistant using a GRU-based neural network model built from scratch to answer questions related to Imperial College. Additionally, integrated Facebook's DrQA model to enable answering of more general knowledge questions.
- Implemented an interactive UI for the assistant, as well as an admin dashboard with the ability to analyse and improve the neural network model. **Chosen as one of the top 5 projects.**

Medify - Partnered with Microsoft   *Java (AndroidSDK), Google Vision API, Firebase, Git*
- Developed a medication verification and tracking Android application using Optical Character Recognition, that scans the prescription and medication barcode to verify that the medication was dispensed correctly, with added functionality of reminders, authentication for multiple users, sharing medication schedule in groups, etc. **Achieved over 85%.**

PintOS Operating System   *C, Git*
- Led a team to develop an operating system for the x86 instruction set architecture. Implemented thread scheduling, system calls and management of virtual memory. **Achieved over 85%.**

WACC Compiler   *Java, ANTLR, Git*
- Worked in a team to develop a compiler for the WACC language. Implemented the front end and the back end of the compiler and added functionality of function overloading, loops, and classes with inheritance to the language, as an extension. **Achieved over 95%.**

ARM11 Emulator and Assembler   *C, Python, Git*
- Led a team to develop an emulator and assembler for a subset of ARM11 instructions which were eventually run on a Raspberry Pi. Implemented a piano, with buttons for LED lights that were powered by the GPIO pins using C and Python, as an extension. **Achieved over 90%.**