**Antara Ray**

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**732 289 2835**

**PROFESSIONAL SUMMARY:**

* Around 10+ years of IT experience which includes 5 years as **Python Developer**, proficient coder in **multiple languages and environments** including **Python**, **AWS**, **C**, **C++** and **SQL**.
* Wrote python scripts to parse **XML** documents and load the data in database and developed **web-based** applications using **Python**, **CSS** and **HTML**.
* Worked on applications and developed them with **XML**, **JSON**, **XSL** (**PHP**, **Django**, **Python**, **Rails**).
* Experienced in developing **Web Services** with **Python** programming language.
* Experience in writing **Sub Queries**, **Stored Procedures**, **Triggers**, **Cursors**, and **Functions** on **MySQL** and **PostgreSQL** **database**.
* Cleaned data and processed third party spending data into maneuverable deliverables within specific formats with **Excel macros** and **python libraries.**
* Experienced in developing **web-based** applications using **Python**, **Django**, **PHP**, **C++**, **XML**, **CSS**, **HTML**, **DHTML**, **JavaScript** and **Jquery**.
* Experienced in working with various **Python IDE's** using **PyCharm**, **PyScripter**, **Spyder**, **PyStudio** and PyDev.
* Good experience of software development in **Python** and **IDEs**: **pycharm**, **sublime text**, **Jupyter Notebook**.
* Experienced in **web applications development** using **Django/Python** using **HTML/CSS** for server-side rendered applications.
* Hands on experience working in **WAMP** (**Windows**, **Apache**, **MYSQL**, and **Python/PHP**) and **LAMP** (**Linux**, **Apache**, **My SQL**, and **Python/PHP**) Architecture.
* Worked on **Anaconda Python Environment**.
* Developed views and templates with **Python** and **Django's** view controller and templating language to create a user-friendly website interface.
* Experience in implementing **python** alongside using various libraries such as **mat plotlib** for **charts** and **graphs**, **MySQL db** for database connectivity, **python-twitter**, **PySide**, **Pickle**, **Pandas data frame**, **network**, **urllib2**.
* Experienced in using python libraries like **BeautifulSoup**, **NumPy**, **SciPy**, **matplotlib**, **Python-twitter**, **NetworkX**, **urllib2**, **MySQLdb** for **database connectivity** and **IDEs** - **Sublime Text**, **Spyder**, **PyCharm**.
* Experienced in **Requirement gathering**, **Use Case development**, **Business Process flow**, **Business Process Modeling**.
* Extensively used **UML** to develop various **use cases**, **class diagram** and **sequence diagrams**.
* Well versed with design and development of presentation layer for **web applications** using technologies like **HTML5**, **CSS3**, **JavaScript**, **JQuery**, **AJAX**, **AngularJS**, **Bootstrap**, **JSON**, **XML**.
* Exceptionally solid background in composing **API's** along with **Web Services** over **Python**.
* Experience in using **Adobe Flash**, **SVN**, **Eclipse**, **JIRA**, **Github** and **CVS**.
* Experience working knowledge in **UNIX** and **Linux** shell environments using command line utilities.
* Experience with **Unit Testing**/ **Test Driven Development**(**TDD**), **Load Testing** and **Integration Testing**.
* Experienced in version control systems using **CVS**, **SVN** and **Git/Github** and issue tracking tools like **Jira** and **BugZilla**.
* Experienced in writing **SQL Queries**, **Stored procedures**, **functions**, **packages**, **tables**, **views**, **triggers**.
* Experience in working with **Python ORM** Libraries including **Django ORM, SQLAlchemy**.
* Experience in **building frameworks** and automating complex workflows using **Python** for **Test Automation**.
* Experience in implementing with server side technologies with restful **API** and **MVC design** patterns with **node JS** and **Django framework**.
* Hands on experience in using **NOSQL libraries** like **MongoDB, Cassandra, Redis** and **relational databases** like **Oracle, SQLite, PostgreSQL** and **MYSQL databases**.
* Worked on **UNIX shell scripts** for business process and loading data from different interfaces to **HDFS**.
* Experience in deploying applications in **heterogeneous Application Servers TOMCAT, Web Logic** and **Oracle Application. Server**.
* Good Knowledge in **Amazon AWS** **concepts** like **EMR and EC2 web services** which provides fast and efficient processing of **Big Data**.
* Proficiency with the application servers like **WebSphere, WebLogic, JBOSS** and **Tomcat**.
* Proficient in **Object oriented design** experience, with extensive experience of **Python-C/C++** binding using **Boost Python** and **Python C types**.
* Experiences with **File Handling** and **SSH** (**Secure Shell**).
* Working knowledge of errors and exceptions handling **debugging** using **PDB**, **Eclipse** and **Pycharm**.
* Experience with **Docker**, deployment of application inside software containers.
* Excellent **Debugging, Problem Solving, Optimization** and **Testing Skills using GitLab**
* Experience in Python Development and Scientific Programing, and using Numpy and Pandas in Python for Data Manipulation.
* Experience in using Scikit-Learn and Statsmodels in **Python** for **Machine Learning** and **Data Mining**.
* Use of **NLTK, OpenNLP** & **StanfordNLP** for Natural Language Processing and sentiment analysis.
* Experience with **SQL Server Management Studio, SQL Developer, Toad** and **MySQL GUI Tool**.

**TECHNICAL SKILLS**

**Operating Systems:** Windows, MAC OS, Unix/Linux

**Languages:** Python, C++,Java, J2EE

**Python Libraries:** Numpy, Matplotlib, Statsmodels, Scikit-learn/sklearn, SOAP, Scipy

**Python Frameworks:** Pandas, Flask, Django, Docker

**Python IDE:** Sublime Text 3, Eclipse, Jupyter Notebook, VIM, Pycharm

**NLP used for Python:** NLTK, OpenNLP, StanfordNLP (NER, POSTag, Tokenization)

**Databases:** RDBMS (Oracle, SQL Server, MySQL), No SQL (MongoDb), HDFS (Hadoop)

**Web Technologies:** CSS, JavaScript, XML, AJAX, JQuery, Bootstrap, AWS, RESTFul Web Services

**Other Tools***:*Putty, SQL developer, Toad, JIRA, Matlab, R

**PROFESSIONAL EXPERIENCE+**

**J P Morgan Chase** – NYC, NY April 2017 – Current

*Sr Python Developer*

JPMorgan Chase & Co. is multinational [investment bank](https://en.wikipedia.org/wiki/Investment_banking) and [financial services](https://en.wikipedia.org/wiki/Financial_services) company headquartered in [New York City](https://en.wikipedia.org/wiki/New_York_City). JPMorgan Chase is the [largest bank in the United States](https://en.wikipedia.org/wiki/List_of_largest_banks_in_the_United_States), and the [sixth largest bank in the world](https://en.wikipedia.org/wiki/List_of_largest_banks) by total assets, with the amount of $2.534 [trillion](https://en.wikipedia.org/wiki/10%5E12). It is the world's most valuable bank by [market capitalization](https://en.wikipedia.org/wiki/Market_capitalization).

**Responsibilities**

* Automate different workflows, which are initiated manually with **Python scripts** and **Unix shell scripting**.
* Create, activate and program in **Anaconda environment**.
* Worked on predictive analytics use-cases using R language
* Use **Python** unit and functional testing modules such as **unit test**, **unittest2**, **mock**, and **custom frameworks** in-line with **Agile Software Development** methodologies.
* Develop Sqoop scripts to handle change data capture for processing incremental records between new arrived and existing data in **RDBMS** tables.
* Manage datasets using **Panda data frames** and **MySQL, queried MYSQL database queries** from **pytho**n using **Python-MySQL** connector and **MySQL dB** package to retrieve information.
* Involved in the **Web/Application development** using **Python 3.5, HTML5, CSS3, AJAX, JSON** and **Jquery**.
* Develop and tested many features for dashboard using **Python, Java, Bootstrap, CSS, JavaScript** and **Jquery**.
* Generated **Python Django** forms to record data of online users and used **PyTest** for **writing test cases**.
* Implemented and modified various **SQL queries** and **Functions, Cursors** and **Triggers** as per the client requirements.
* Clean data and processed third party spending data into maneuverable deliverables within specific format with Excel macros and python libraries such as **NumPy, SQLAlchemy and matplotlib**.
* Used **Pandas** as **API** to put the data as time series and tabular format for manipulation and retrieval of data.
* Helped with the migration from the old server to **Jira database** (**Matching Fields**) with **Python scripts** for transferring and verifying the information.
* Analyze Format data using **Machine Learning algorithm** by **Python Scikit-Learn**.
* Experience in **python, Jupyter**, Scientific computing stack (**numpy, scipy, pandasand matplotlib**).
* Perform troubleshooting, fixed and deployed many **Python bug fixes** of the two main applications that were a main source of data for both customers and internal customer service team.
* Write **Python scripts** to parse **JSON** documents and load the data in database.
* Generating various capacity planning reports (graphical) using Python packages like **Numpy, matplotlib**.
* Analyzing various logs that are been generating and predicting/forecasting next occurrence of event with various **Python libraries**.
* Developed single page application by using **Angular JS** backed by **MongoDB and NodeJS**.
* Design and maintain **databases** using **Python** and developed **Python based API** (**RESTful Web Service**) using **Flask and SQL Alchemy**.
* Manage code versioning with **GitHub, Bit Bucket** and deployment to staging and production servers and implement **MVC architecture** in developing the **web application** with the help of **Django framework**.
* Use Celery as task queue and **RabbitMQ, Redis** as messaging broker to execute asynchronous tasks.
* Design and manage **API system deployment** using fast http server and **Amazon AWS architecture**.
* Develop remote integration with third party platforms by using **RESTful web services** and Successful implementation of **Apache Spark and Spark Streaming applications** for large scale data.
* Built various graphs for business decision making using **Python mat plotlib library**.
* Involved in development of **Web Services** using **SOAP** for sending and getting data from the external interface in the **XML** format.
* Export Test case Scripts and modified the selenium scripts and executed in **Selenium environment**.
* Developed entire frontend and backend modules using **Python on Django Web Framework**.
* Scraping website using **Python Beautiful Soup**, and then parsed it with **XML**.
* Outputting the parsed data **as JSON/BSON** and stored into **MongoDB**
* Used **NLTK** and **StanfordNLP** to process text data and created offline intelligence.
* Querying data from **MongoDB** and use them as input for the machine learning models
* Using **AWS** for application deployment and configuration.
* Wrote **UNIX shell scripting** for automation.
* Developed views and templates with **Django** view controller and template Language to create a user-friendly website interface.
* Used **JavaScript** and **JSON** to update a portion of a webpage.
* Develop consumer based features using **Django, HTML and Test Driven Development** (**TDD**).
* Developed **Python web services** for processing **JSON** and interfacing with the Data layer.
* Increased the speed of pre-existing search indexes through **Django ORM** **optimizations**.
* Developed module to build **Django ORM queries** that can pre-load data to greatly reduce the number of databases queries needed to retrieve the same amount of data.

**Environment:** Python 2.7, Django, HTML5/CSS, PostgreSQL, MS SQL Server 2013, MySQL, JavaScript, Jupyter Notebook, VIM, Pycharm, Shell Scripting, JIRA.

**State of Indiana** – Indianapolis, IN Jun 2016 – Mar 2017

*Python Developer*

Indiana Department of Health administers healthcare programs, such as Medicare, Medicaid, Children's Health Insurance Program (CHIP), and these three major national healthcare programs benefit millions of Americans.

**Responsibilities:**

* Worked in comprehending and examining the client's business requirements.
* Used **Django frameworks** and **Python** to build **dynamic webpages**.
* Developed tools for monitoring and notification using **Python**.
* Enhanced the application by using **HTML** and **Java script** for design and development.
* Used data structures like directories, tuples, object oriented class based inheritance features for making complex algorithms of networks.
* Created **PHP/MySQL** back-end for data entry from Flash and worked in tandem with the Flash developer to obtain the correct data through query string
* Involved in designing database **Model,** Views using python to build an interactive **web based solution**.
* Generated **Python Django** Forms to record data of online users.
* Implemented Data tables to **add, delete, update** and **display** patient records and policy information using PyQt.
* Implemented a module to connect and view the status of an **Apache Cassandra instance** using **python**.
* Developed **MVC** prototype replacement of current product with **Django**.
* Improved the **Data Security** and generated report efficiently by caching and reusing data.
* Created **UI** using **JavaScript** and **HTML5/CSS3**.
* Managed datasets using **Panda data frames** and **MYSQL**. Queried the database queries using **Python-MySQL** connector and retrieved information using **MySQLdb**.
* Recorded the online users' data using **Python Django** forms and implemented test case using **Pytest**.
* Developed the application using the **TestDriven methodology** and designed the unit tests using **Python Unit test framework**.
* Created **web application** prototype using **jQuery**.
* Deployed the project into **Heroku** using **GIT version** control system,
* Maintained and Updated the application in accordance to the clientele's requirement

**Environment**: Python 3, Django 1.6, Beautiful soup, HTML5, CSS/CSS3, Bootstrap, XML, JSON, JavaScript, JQuery, Angular JS, Backbone JS, Restful Web services, Apache spark, Linux, Git, Amazon s3, Jenkins, MySQL, Mongo DB, T-SQL, Eclipse.

**CITI Bank** -San Diego, CAMar 2015 – May 2016

*Python Developer*

Citibank is the consumer division of [financial services](https://en.wikipedia.org/wiki/Financial_services) [multinational](https://en.wikipedia.org/wiki/Multinational_corporation) [Citigroup](https://en.wikipedia.org/wiki/Citigroup).[[2]](https://en.wikipedia.org/wiki/Citibank#cite_note-2) Citibank was founded in 1812 as the City Bank of New York, and later became First National City Bank of New York. Citibank provides [credit cards](https://en.wikipedia.org/wiki/Credit_card), [mortgages](https://en.wikipedia.org/wiki/Mortgage_loan), [personal loans](https://en.wikipedia.org/wiki/Personal_loan), [commercial loans](https://en.wikipedia.org/wiki/Loan), and [lines of credit](https://en.wikipedia.org/wiki/Line_of_credit). The parent of Citibank, received a [bailout](https://en.wikipedia.org/wiki/Bailout) in the form of an investment from the [U.S. Treasury](https://en.wikipedia.org/wiki/United_States_Department_of_the_Treasury). On November 23, 2008, in addition to an initial investment of $25 billion, a further $20 billion was invested in the company along with guarantees for risky assets of $306 billion [[4]](https://en.wikipedia.org/wiki/Citibank#cite_note-4) The guarantees were issued at a time markets were not confident Citi had enough liquidity to cover loses from those investments.

**Responsibilities:**

* Expanded website functionality, using **Flask framework** in **Python** to control the web application logic
* Built automation script using **Qualcomm API** and **Python BeatifulSoup** to scrape data from social network and other websites using Python.
* Exchanged data with **SQL database** and **NoSQL database** such as **MongoDB**
* Conducted **Big Data analytics** using **Hadoop MapReduce**.
* Generated data-driven reports, data visualization using **Tableau**
* Designed front end and backend of the application using **Python** on **Django Web Framework**.
* Used **HTML, CSS, AJAX, JSON** designed and developed the user interface of the website.
* Developed views and templates with **Django** view controller and template Language to create a user-friendly **website interface**.
* Used **JavaScript** and **JSON** to update a portion of a webpage.
* Develop consumer based features using Django, **HTML** and **Test Driven Development** (**TDD**).
* Developed **Python web services** for processing **JSON** and interfacing with the Data layer.
* Used **GIT** version control and deployed project to **Heroku**.
* Increased the speed of pre-existing search indexes through **DJango ORM optimizations**.

**Environment:** Python 2.7, Django, Hadoop, SQL, SAS, Excel, MongoDB, Flask, JavaScript, Eclipse, Shell Scripting, AngularJS

**Allscripts Healthcare Solutions, Inc (HCL Technologies Ltd)** - Raleigh, NCJun 2012 – Dec 2014

*Web Developer*

Allscripts Healthcare Solutions, Inc. is a publicly traded company that provides [physician practices](https://en.wikipedia.org/wiki/Clinical_practice), [hospitals](https://en.wikipedia.org/wiki/Hospitals), and other healthcare providers with [practice management](https://en.wikipedia.org/wiki/Practice_management) and [electronic health record](https://en.wikipedia.org/wiki/Electronic_health_record) technology. Allscripts also provides solutions for patient engagement and care coordination, as well as [financial](https://en.wikipedia.org/wiki/Financial) and [analytics](https://en.wikipedia.org/wiki/Analytics) technology. The company has more than 180,000 physician users and has solutions in 2,700 [hospitals](https://en.wikipedia.org/wiki/Hospitals) and 13,000 extended care organizations

**Responsibilities:**

* Implemented and designed **user interface** for web based customer application.
* Understanding of application development lifecycle methodologies.
* Built pages from Photoshop mockups using **HTML, Java Script, J Query and CSS**.
* Experience on working with **CSS Background, CSS Layouts, CSS positioning, CSS text, CSS border, CSS margin, CSS padding, CSS table, Pseudo classes, Pseudo elements and CSS behaviors in CSS.**
* Designed table-less layouts using **CSS** and appropriate **HTML** tags as per W3C standards.
* Involved in write application level code to interact with **APIs, Web Services using AJAX, JSON and XML.**
* Designed business applications using web technologies like **HTML, XHTML, and CSS** based on the **W3C standards**.
* Integrated with back end code (**PHP**) for highly interactive **AJAX** based applications.
* Involved in writing and modifying **Procedure, Queries, Views & Triggers** and calling them from **JavaScript** using the Temp net Framework.
* Maintained 24/7 high volume availability demands using open source tools such as **Linux, Apache, PHP, and MySQL.**
* Thorough understanding of the differences and **bugs** in various browsers and browser versions.
* Strong **communication, analytical and interpersonal** skills working within cross-functional teams
* Excellent problem solving skills and the ability to work independently.
* Worked on Cross-Browser compatibility and **fixed the bugs** for several browsers.

**Environment:** HTML, CSS, CSS3, JavaScript, jQuery, AJAX JSON, , Bootstrap, Responsive design, Grunt, Bower, NPM.

**Symantec (HCL Technologies Ltd)** - Cupertino, CA Nov 2009 – May 2012

*Python Developer*

Symantec is headquartered in [Mountain View, California](https://en.wikipedia.org/wiki/Mountain_View,_California), [United States](https://en.wikipedia.org/wiki/United_States). The company provides [cybersecurity](https://en.wikipedia.org/wiki/Computer_security) [software](https://en.wikipedia.org/wiki/Software) and services. Symantec is a [Fortune 500](https://en.wikipedia.org/wiki/Fortune_500) company and a member of the [S&P 500](https://en.wikipedia.org/wiki/S%26P_500) stock-market index. The company also has development centers in Pune, Chennai and Bengaluru (India).

**Responsibilities:**

* Used standard **Python modules** e.g. **CSV, Robot parser, Iter tools, Pickle, Jinja2, Xml** for development.
* Managed, developed, and designed a dashboard control panel for customers and Administrators using **HTML, CSS, JavaScript, Bootstrap, JQuery** and **RESTAPI** calls.
* Query and set up employee registration and login using **Python PostgreSQL**
* We use a multiple row data storage strategy called **MVCC** to make effective **PostgreSQL** responsive in Querying and storing in database.
* Experience for handling documented database and video file for online management system during creating online learning management solutions.
* Automated **RabbitMQ** cluster installations and configuration using **Python/Bash**.
* Used **Pandas API** to put the data as time series and tabular format for east timestamp data manipulation and retrieval.
* Fetched twitter feeds for certain important keyword using **Python-twitter library**.
* Used Python library Beautiful Soup for web scrapping to extract data for building graphs.
* Performed troubleshooting, fixed and deployed many **Python bug fixes** for **Learning Management System**
* Used Python Flask framework to build modular & maintainable applications.
* Automated data movements using **Python scripts**.
* Involved in splitting, validating and processing of files.
* Created core **Python API** which will be using among multiple modules.
* Uploaded statistics to **MySQL** for analysis and logging.
* Developed complex **SQL queries** for testing the **database functionality**.
* Used **UNIX server** for application deployment and configuration.
* Written shell scripting for automation.
* Provided technical assistance for **maintenance, integration and testing** of software solutions during development and release processes.
* Created **unit test/regression test framework** for working/new code.

**Environment:** Python, Django, Linux, HTML, CSS, Shell Scripting , PostgreSQL, MySQL, Python-Twitter Library, Flask, Web services, SVN, Pandas, FileZilla etc.

**Symantec (HCL Technologies Ltd) –**Noida,India Jan 2008 – Oct 2009

*Web Developer / CAD Designer*

HCL Technologies Limited (Hindustan Computers Limited) is an Indian multinational technology company, headquartered in [Noida](https://en.wikipedia.org/wiki/Noida), Uttar Pradesh, India. It is a subsidiary of HCL Enterprise. Originally a [research and development](https://en.wikipedia.org/wiki/Research_and_development) division of HCL, it emerged as an independent company in 1991 when HCL ventured into the software services business.

The company has offices in 39 countries including the United States, France and Germany, and the United Kingdom with a worldwide network of R&D, "innovation labs" and "delivery centers", and 120,000+ employees and its customers include 250 of the Fortune 500 and 650 of the Global 2000 companies. It operates across sectors including aerospace and defense, automotive, banking, capital markets, chemical and process industries, consumer goods, energy and utilities, healthcare, hi-tech, industrial manufacturing, insurance, life sciences, manufacturing, media and entertainment, mining and natural resources, oil and gas, retail, telecom, and travel, transportation, logistics & hospitality.

**Responsibilities:**

* Created or identified state-of-the-art **computational mechanics algorithms** that extend modeling capabilities, implement as software suitable for high-performance computers, and document their verification.
* Wrote script or program to automate analysis tools to streamlining the evaluation of initial data for integrity.
* **Built application and program** to streamline the cavity development and process and generate documentation from the design and via versa.
* Automated data movements using Python scripts. Involved in **splitting, validating and processing of files**.
* Participated in developing web application **UI** using **HTML, CSS, JavaScript**.
* Uploaded statistics to **MySQL** for analysis and logging.
* Developed complex **SQL queries** for testing the database functionality.
* Used **UNIX server** for application deployment and configuration.
* Wrote shell scripting for automation.
* Designed database schema design and defined relationships between tables.
* Provided technical assistance for **maintenance, integration** and **testing** of software solutions during development and release processes.
* Created **unit test/regression test** framework for **working/new code**.
* Provided **design/CAD** team strong scripting capabilities in **SKILL, PERL, Ocean, Linux Shell**, etc.
* Interface with **CAD tool** vendors to prove out releases and flows, solve bugs, improve usability, etc.
* Performed **3D Modelling** and Analysis using **CAD tools**
* Wrote script and macros for analysis tool for dynamic analysis
* Installation of different **Unix System, CAD, Database** required to perform
* Solution for existing machinery and new developed machine based on analysis and simulation.
* Creating **3D complex surface modelling** and do various **static, dynamic and fluid analysis**.
* Supporting documentation needed for manufacturing engineering change request and clearly and frequently communicate with all functional areas.

**Environment:** CAD, UNIX, MySql, Pandas, OpenNLP, StanfordNLP, CSS, JavaScript, XML, Matlab

**Microsoft–** Ahmedabad,India June 2006 - Dec 2007

Test Engineer

Project: Vista Compatibility and Compliance

**Responsibilities:**

* Responsible for **UI, Functional, Web Services, cross browser, Automation, Reports Testing of Web, distributed, SOA, Reporting, legacy.**
* Worked as a Team Member in a Team which uses 4 week **Sprint of Scrum methodology**.
* Performed Manual/Functional Testing of Deposit, Vouchers, and Check Processing in online and offline mode.
* Written user-defined functions and generated **Test Matrix**
* Maintained central repository to determine the readiness of the application by **combining Planning, Execution and Defect Tracking.**
* **Importing requirements, create test cases, validate requirements** with **test cases** and generate reports using **Quality Center**
* Responsible for execution of **JUnit Test Cases using Eclipse IDE.**
* Worked on Developing Automation Scripts to perform **Automation Testing** of **Web Application** using **Selenium Web Driver API, Selenium framework,**
* Manage the testing process, schedule batch tests, log and track defects using Quality Center.
* Developed **Test Cases using WSDL, Schema** files which defines Web Service Request, Response, methods/operations, End Point of web service to be tested.
* Participate in review meetings to **resolve bug** related issues with developers

**Environment:** ACT 5.0 toolkit, SAT, SUA, Orca

**EDUCATION**

CSIT-Heritage Institute of Technology, Kolkata - West Bengal Institute of Technology - CGPA 7.52 - Year of passing 2006