▶Pronoy Mukherjee

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Education

Bachelor of Technology in Computer Science (B. Tech)
- Year of completion: 2019
- Neotia Institute of Technology, Management and Science (MAKAUT).
  YGPA: 8.04/10

XII (Senior Secondary), Science
- Year of completion: 2015
- ISC Board (National Gems Higher Secondary School)
- Percentage: 80.9%

X (Secondary), Science
- Year of completion: 2013
- ICSE Board (National Gems Higher Secondary School)
- Percentage: 81.2%

Skills

- Java (Intermediate)
- Java FX (Beginner)
- Android (Advanced)
- Node JS (Advance)
- iOS – swift (Beginner)
- JavaScript (Intermediate)
- C (Intermediate)
- C# (Intermediate)
- MySQL (Advanced)
- SQL Server (Beginner)
- MongoDB (Intermediate)
- Arduino (Intermediate)

- ➢ Redis Cache (Intermediate)
- ➢ Shell Scripting (Intermediate)
- ➢ Rest API (Advance)
- ➢ Amazon Web Services - AWS (Intermediate)
- ➢ Azure (Beginner)
- ➢ Nginx (Intermediate)
- ➢ Microservices (Intermediate)
- ➢ Linux (Advance)
- ➢ Windows (Intermediate)
- ➢ MacOS (Intermediate)

Trainings & Certifications

- ➢ Python Training
  Institute of Engineering and Management, Kolkata
  November 2015
- ➢ Android Training
  Globsyn Group, Kolkata,
  January 2017.
- ➢ Hackathon at Jadavpur University,
  Came 4th overall.
- ➢ AWS- Developer Associate 2020
  August 2020.

Experiences

- ➢ **Software Engineer at PricewaterhouseCoopers** (https://www.pwc.in/).
  Data Analyst Team. January 2020 – Present.

  - • Working with PLSQL, NodeJS and AWS Lambda.
  - • Created stored procedures to calculate financial data from huge data sets.
  - • Creating API to upload Excel files to AWS S3 and triggering AWS Lambda.
  - • Creating the database architecture for several projects. Heading a team of 3 people.

- Worked on supply chain management project, designed the entire database alone.
- Created a JAVA based ETL tool to extract csv files from SAP and integrate with ERP system.
- Increased performance of information extraction by 45% by applying an asynchronous file extraction.
- Created an algorithm to predict material requirements for a client based past requirements.
- Heading a team of 3 people.

➢ **Senior Software Engineer at HyperXchange** (https://www.hxcart.com/). Android Development team March 2018- December 2019.

- Created an android app single handedly to test the device condition of any android device.
- Designed a new algorithm to calculate a score based on the test and hence calculate the price for selling it.
- Implemented a new algorithm to test any feature in an asynchronous way which went on to increase the app performance by 40%.
- Created an automatic machine to test android phones (*Applied a Patent for it*).
- Implemented Single-Sign-On for the apps and ERP system.
- Have a *patent* for an algorithm to calculate the depreciating value of a mobile.
  Application Number: 201831041563.
- Developed an Android app to maintain the attendance of employees and inform them of visitors coming to meet them at office using a unique QR code scanning and biometric method.
- Improved the performance of matching fingerprint by at least 40% using an algorithm.
- Designed and developed a highly scalable ERP solution using NodeJS and MySQL as a database service from scratch.
- Improved the performance of e-commerce API service by at least 70% by implementing micro-service architecture.
- Headed a team of 7 people.

➢ **Internship at PricewaterhouseCoopers** (https://www.pwc.in/). Data Analyst team June 2017- July 2017.

- Implemented Encryption on database tables.
- Improved the performance of data retrieval after encryption by at least 35% by removing un-necessary encryptions and decryptions.
- Created a tool to generate dummy excel files to test automatically.
- Semi-automated the unit testing process.

Projects

➢ **Smoke Detector App** (Android using Java and C for Arduino)
https://github.com/Pronoy999SmokeDetector_App

- An Android to app to receive Bluetooth data and send SMS.
- Created a new format to recognize the end of data and sort them and send a text.
- Implemented a way to save battery life of the device by switching off the Bluetooth once the data is received.
- Implemented a way to integrate with Arduino to fetch smoke data from MQ2 sensor.

➢ **Indian Railways Enquiry** (Android using Java)
https://github.com/Pronoy999/IndianRailwaysEnquiry

- An Android app to make queries for the Indian Railways.
- Created a way to make the app more useful than any others by introducing the links between the activities to prevent the user from entering repeated information twice.
- Designed a way to save the searches made by the user based on the local usage statistics.

➢ **Notepad Simpler** (Android with Java)
https://github.com/Pronoy999/Notepad_Simpler

- A notepad android app. Implemented a way to save data automatically whenever the user closes the app.
- Created a way to keep the exact format of the data in which user types.
- Designed a way to save the memory by not saving the data when the user keeps the text field empty.

➢ **Database Minimizer** (C#)
https://github.com/writzx/DataBaseMinimizer

- A dot Net application to minimize a database using the SIDE Algorithm.
- Created an algorithm to generate the rules function from the minimized database.
- Designed a faster way to recognize a similar pattern and hence ignore those to save memory.

- **Smart Attendance Manager** (Android with Java and NodeJS for server)
  https://github.com/Pronoy999/Classistant

  - An android application which takes the attendance of the whole class in a matter of few minutes.
  - Created the whole backend of the app with NodeJS.
  - Implemented a way to generate, share and visualize an excel report for the attendance data.
  - Implemented a way to save the data to the phone in an efficient way so that it can fetched with the maximum speed.

- **Simulator Of Intel 8085 Microprocessor** (C#)
  https://github.com/Pronoy999/Project-OneX

  - This is a simulator for the intel 8085 microprocessor.
  - Implemented a way to parse the code of the user using Regular Expressions.
  - Created the memory map of the Intel 8085 microprocessor.
  - Wrote the core functions of the Intel 8085 instruction set.
  - **Published a research paper** on International Journal on Future Revolution in Computer Science & Communication Engineering.
    Link to the research paper:
    http://www.ijfrcsce.org/download/browse/Volume_5/February_19_Volume_5_Issue_2/1549973837_12-02-2019.pdf?fbclid=IwAR1T1tbGSzit023AUhQUENPXrCqMQ-ftMBt5OHJssXdcC1rYRkeiOVwuaWE

- **Petcoset** (NodeJS and Angular 7)
  https://github.com/Pronoy999/Petcoset
  - A Project for pet animals and pet lovers.
  - Designed and developed the system for a person to book a pet sitting for someone else.
  - This system will offer services for various pet.
  - Design the architecture and developed the entire backend alone.

Connect with me @

- GitHub Profile (https://github.com/Pronoy999)
- LinkedIn Profile (https://www.linkedin.com/in/pronoymukherjee999/)
- Stack Overflow (https://stackoverflow.com/users/4957929/pronoy999)

Co-curricular Activities

- Cricket
- Football
- Drama

Additional Details

Analytically driven professional with huge problem-solving skills. Always looking for opportunities to dive into deep algorithmic problems and try to optimize them or bend them to my will. Skilled in development of Enterprise apps or implementing algorithms to optimize the end user experience. Keen learner. Graduated from West Bengal University of Technology, Kolkata.