# Oyshee Saha Roy

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# **Professional Summary**

User Experience Researcher and Designer with experience in conducting user studies, data analysis and designing different interactive interfaces. Senior System Engineer with 3.5 years of experience in working as a Java and Mendix Developer using Agile methodology. Experienced in working as an Analyst for Dalhousie Analytics, Dalhousie University. Involved in business requirement gathering, identifying gaps, effort estimations and implementing solutions with adherence to best practices and development guidelines

## Skills

- HTML5, CSS3, shell scripting
- MySQL, Oracle, PostgreSQL, PLSQL
- Google Analytics, Tableau, Mendix, GitHub, Jira, Mantis, Bitbucket, Putty
- Anaconda Distributions, Eclipse, • Pycharm, Sublime text, Google Colab, • Microsoft Visual Studio, Notepad++, LaTeX, Jupyter Notebook, Excel, • Designing using Inkscape, Illustrator Marvel
- Python, Java, BrightScript, JavaScript, Data Science and Machine Learning Algorithms
  - Qualitative and Quantitative data analysis
  - Conducting user studies
  - Designing prototypes for applications
  - Design and build static and dynamic website

# **Work History**

### Student Analyst Dalhousie University| Halifax, NS

02/2019 - 08/2019

- Participated in requirements meetings and data mapping sessions to understand business needs
- Designed and developed schema data models
- Fetched JSON data from RESTful APIs. The fetched data were cleaned and stored in tables in PostgreSQL
- The collected data was further processed using Fuzzy matching

- Helped solve diverse program problems with in-depth analysis and provided recommendations based on analysis.
- Analyzed data were visualized using matplotlib, plotly, and Dash apps
- Updated organizational subsystems to improve and streamline data collection

# Senior Systems Engineer Infosys Ltd| Trivandrum, India

08/2014-12/2017

#### Roku

- Development of front-end scripts for Roku boxes.
- Participated in all phases of system development life cycle, from requirements analysis through system implementation
- Involved in sprint planning, stand-ups in an Agile environment
- Designing and development of Electronic programming guides
- Development of Video on Demand screen, video playing features, notification and warning messages, and other features of live as well as video on demand streaming services
- Involved in development, dev testing, unit testing, quality assurance of Roku application

#### TNT

- Development and maintenance of Mendix application solutions for Head office operations including forms, entities, microflows, transactions, and domain models
- Performed Unit Testing as per project and client-based guidelines
- Participated in all phases of system development life cycle, from requirements analysis through system implementation
- Involved in maintaining databases of transactions, employee history, appraisal forms, delivery status and goods details
- Development of features of applications, directly interacting with clients and providing solutions.

#### Loreal

- Development and maintenance of POS application
- Experience in handling loyalty-based program

# **Education**

Master in Computer Science
Dalhousie University| Halifax, NS

10/2019

Thesis: Framework to Guide Designing of Interactive Tools for Art galleries

Link: https://dalspace.library.dal.ca//handle/10222/76305

Bachelor of Technology| Computer Science WBUT| Kolkata, India

06/2014

# **Projects**

#### Promoting ACT (Acceptance and Commitment Therapy) through mobile application

- Conducted user-studies (online survey, interviews, and user feedback) at different stages of the project
- Online survey results were transformed into data points and clustered using K-means, DBscan
- Built low-fidelity and high-fidelity prototypes and wireframes for mobile application
- Conducted A/B testing
- Conducted Heuristic evaluations and collected user feedback on the prototype

## **Heart Disease Prediction using Data Mining Techniques**

- Decision tree classification (J48, Random forest) as well as a probabilistic classification algorithm were used for prediction
- Data pre-processing and noise handling techniques were implemented to get rid of redundant data (existing patient data set of Cleveland from UCI repository)
- Feature selection techniques such as PCA, multi-variate ANOVA-F, regression were used to reduce the dimensionality of data and select the most representative features of heart disease in human
- Measures were taken to reduce false positive and computational complexity
- A framework based on principles of federated learning was implemented, in order to fit the solution of our problem in a distributed manner

### **Publication** and Certification

Oyshee Saha Roy and James Blustein, "Protocol to build a Framework for Designing an Interactive Tool for Art Gallery Visitors"," HUMAN'19: 2nd International Workshop on Human Factors in Hypertext Proceedings", 2019, Hof, Germany.

Introduction to User Experience Principles and Processes (University of Michigan on Coursera)

## References

**Claudia Rangel, PhD,** Chief Analyst and Managing Director, Dalhousie Analytics **E:** cl221087@dal.ca

**Dr Jamie Blustein,** Associate Professor, Dalhousie University **E:** jamie@cs.dalprofs.org