

Supratim Halдар

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- Self-driven, quick learner and passionate about data with strong business acumen and problem-solving capabilities.
- Sound knowledge of **Statistics, Linear Algebra, Calculus** and **Machine Learning Algorithms**.
- Looking forward to leveraging my functional and technical knowledge and experience in a role as **Data Scientist / Machine Learning Architect**.
- Insightful experience in **Telecommunications, online retail** and **any Digital-Service-Provider** business domains.
- Working as **Solution Architect** for **Oracle**, building products with **advanced predictive capabilities**.
- Experienced in working as part of both **Product Development/Engineering** and **Project Implementation/Consulting** teams across organizations.
- Exposure to building **large-scale applications intertwined with Predictive Analytics capabilities**, catering to both B2B and B2C markets.
- Solid understanding of **Cloud Technologies and Architecture**.
- Extensive experience in working globally in customer-facing roles and multi-vendor environments, and leading **Digital Transformation and Analytics** projects for major telecom operators and digital service providers in **NAM, EMEA and JAPAC** regions.
- Experienced in managing development team of 10+ members.

KEY SKILLS/KNOWLEDGE

- **Programming:**
 - **Proficient:** Python (including Numpy, Scipy, Sklearn, Pandas, Matplotlib, Seaborn, Plotly), C
 - **Intermediate:** Tensorflow and Keras
- Data Structures, Algorithms and Design Patterns
- **Database:** SQL, PL/SQL, NoSQL (MongoDB)
- **In-depth mathematical and hands-on understanding of M/L and D/L algorithms:**
 - Regression and Classification
 - CART and Decision Forests and other Ensemble Methods
 - K-Means Clustering, PCA, Anomaly Detection, Collaborative-Filtering and Content-Based Filtering Recommenders
 - Deep Neural Network, Convolution Neural Network
 - Time Series Analysis
- Data Ingestion (including web scraping), Data Visualization, Exploratory Data Analysis, Feature Engineering, Predictive Modelling, Data Mining, Pipeline and Ceiling Analysis methods, ETL
- **REST Architecture and Principles, Microservices** architecture pattern
- **Methodology:** Waterfall, Agile and Scrum, Business Process Modelling
- **Tools:** Rational Rose, MS Project, MS Visio, Confluence, GIT, SVN, CVS, JIRA, Quality Center etc.
- **Architecture Concepts:** TOGAF, TMForum Framework, UML, ITIL

PERSONAL PROJECT PORTFOLIO

- [What's happening on the roads of Bangalore?](#) - An analysis of accident data on Bangalore roads, collected by Intel CAS in BBMP buses

- [Why are customers leaving?](#) - A deep-dive into churn analysis in telco industry and predicting next possible churns
- [Neural Style Transfer](#) - Generating art using Deep Learning
- [Identifying outdoor scenery using convolution neural network](#) – as part of an online challenge, built a classifier which can predict presence of an outdoor scene (eg – mountains, glaciers etc) with an accuracy of ~97% on train data and ~94% on test data
- [Identifying presence of cactus plants in deserts from aerial images](#) – as part of Kaggle competition, built a classifier capable of predicting whether an image contains a columnar cactus, with AUROC of upto 0.9984 on unseen test data.
- [Movie Recommender System using Collaborative Filtering from scratch](#) - recommend movies to user based on taste of other similar users
- [Implementation of key M/L algorithms from scratch in Python](#)
- Developed datasets through web-scraping - [AllSides : Ratings of bias in electronic media](#) and [BikeWise.org : Bike related reported incidents](#)

PROFESSIONAL EXPERIENCE

ORACLE INDIA

Solution Architect of apps and analytics products (IC Role)

Bangalore, India

April 2009 – Present

Roles and Responsibilities:

- Working as a **Solution Architect** in Oracle Communications Consulting Business Unit.
- At present, working as Lead Architect of a **Hybrid Cloud Solution with Predictive Analytics Capability for Communication Industry** (CX on cloud, and order orchestration, service fulfillment, monetizing and analytical functionalities on premise).
 - Responsible for **designing end-to-end architecture, business process framework and design of M/L framework.**
 - Playing a mixed role of **Architect** and **Data Scientist**, in **strategizing the roadmap** of the solution suite and **designing and building solutions.**
 - Some of the use cases for which I designed **Machine Learning Model**:
 - **Cluster Analysis** to generate segmented profile of customers
 - **Classification** model to predict whether a customer might **churn**, with accuracy of ~90% on real-world data
 - Recommend next best offer to customers based in multiple attributes
- Involved in response to **RFI and RFP, preparation of estimation and proposal and preparation and execution of showcase demos** with Pre-Sales/Sales teams.
- Attend **Requirement-Driven-Design (RDD)** and **Solution-Driven-Design (SDD)** workshops with business teams of clients to understand their business needs, process and objectives.
- Proficient in translation of business requirements into functional and technical requirements, and guidance to implementation team in design and development activities.

In depth technical knowledge and experience of following Oracle products:

- Oracle Revenue Management Suite: OBRM, ECE, PDC, OMC
- **Oracle BI Publisher Reports (BIP): Reports and Analytics functionality**
- **Oracle Communications Data Model: Standard-based normalized data model, with pre-built data mining capabilities using Oracle Advanced Analytics**
- **Oracle Data Integrator: Advanced ELT tool**
- Oracle Siebel CRM
- Oracle Cloud CX Suite (SaaS and PaaS)

Some of the key clients I had the privilege to worked with:

- **Europe:** Vodafone Malta and multiple Vodafone OpCos in Europe
- **Asia:** Dhiraagu Maldives, Atria India, Uninor India
- **North America:** Equifax in Atlanta, Verizon Telematics (HUM) in Atlanta, Charter Communications in St. Louis, Sirius XM Satellite Radio in New York City, Dell (Auto Renewal Service)

AMDOCS DEVELOPMENT LTD.
Senior Subject Matter Expert

Limassol, Cyprus
July 2005 - February 2009

- Worked as a Development Team Lead for both **Amdocs Engineering and Implementation Teams**
- Some of the key projects I was involved in: AT&T and Sprint, USA

USHACOMM INDIA PVT. LTD.
Software Developer

Kolkata, India
June 2003 – June 2005

- As part of **Core Development Team**, was involved in design and development **Unicorn 6.0** product, mainly focused on **Inventory Management, Dealer Management** and **System Administrator** modules.

EDUCATION

- University of Kalyani, West Bengal, India - B.Tech (IT), May 2003
- **Machine Learning** by Stanford University (through Coursera)
- **Neural Networks and Deep Learning** by deeplearning.ai (through Coursera)

EXTRA-CURRICULAR ACTIVITIES/ADDITIONAL SKILLS/HOBBIES

- Photography (<https://500px.com/supxyz>)
- Sports: Cycling, Running, Badminton, Table-Tennis
- Reading fiction, non-fiction, biographies and autobiographies