### Supratim Haldar

Bangalore, India

Phone: +91 8884688864

Email: <a href="mailto:supratimh@gmail.com">supratimh@gmail.com</a>
Website: <a href="mailto:https://supratimh.github.io">https://supratimh.github.io</a>

GitHub: <a href="https://github.com/SupratimH">https://github.com/SupratimH</a>
<a href="https://www.kaggle.com/supratimhaldar">Kaggle: <a href="https://www.kaggle.com/supratimhaldar">https://www.kaggle.com/supratimhaldar</a>

Working as Solution Architect for Oracle, building products with advanced predictive capabilities.

- 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.
- Ranked among top 10% answerers on Python in Stackoverflow.
- 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.
- 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.

### **KEY SKILLS/KNOWLEDGE**

- Programming:
  - O Proficient: Python (including Numpy, Scipy, Sklearn, Pandas, Matplotlib, Seaborn, Plotly), C
  - O 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
  - o 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
- 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 Frameworx, UML, ITIL
- Containerization: Docker and Kubernetes

### PERSONAL PROJECT PORTFOLIO

A snapshot of few projects is provided below. For complete details of all projects, please visit <a href="http://supratimh.github.io">http://supratimh.github.io</a>

At present, I am working on building a classifier to **predict result of ODI cricket matches**, before the match begins. I have "scrapped" the required data and first version of the model is ready. Prediction accuracy on matches of ICC World Cup 2019 has been approximately 85% so far.

More details here: <a href="https://supratimh.github.io/cricket-prediction-cwc19">https://supratimh.github.io/cricket-prediction-cwc19</a>

- Identifying outdoor scenery using convolution neural network as part of an online challenge, built a
  classifier which can predict presence of an outdoor scene (e.g. mountains, glaciers etc.) with an
  accuracy of ~97% on train data and ~94% on test data
- What's happening on the roads of Bangalore? An analysis of accident data on Bangalore roads, collected by Intel CAS in BBMP buses
- <u>Neural Style Transfer</u> Generating art with Deep Learning
- Implementation of key M/L algorithms from scratch in Python
- Developed datasets through web-scraping <u>AllSides : Ratings of bias in electronic media</u> and <u>BikeWise.org : Bike related reported incidents</u>

#### 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 was part of Machine Learning Model design:
    - Cluster Analysis to generate segmented profile of customers
    - Classification model to predict whether a customer might churn, with accuracy of ~80% on real-world data
    - Recommend next best offer to customers based in multiple attributes
- Attend 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: ETL tool to build, manage and maintain data integration processes in business intelligence systems
- Oracle Siebel CRM
- Oracle Cloud CX Suite (SaaS and PaaS)

Some of the key businesses I had the privilege to work 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), 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 (<a href="https://500px.com/supxyz">https://500px.com/supxyz</a>)
- Sports: Cycling, Running, Badminton, Table-Tennis
- Reading fiction, non-fiction, biographies and autobiographies, blogging