DR. KAVITHA CHETANA DIDUGU
SENIOR DATA SCIENTIST

+91-9558933207 | kavithacd@iima.ac.in | www.linkedin.com/in/kavitha-chetana-didugu/

EXECUTIVE SUMMARY

Data Science and Product Professional with 3.5 years of work experience, and strong cross-functional and analytical skills. Experienced in Machine Learning, Deep Learning, Operations Research as well as Product Management (B2B). Curious and quick learner, with a proven track-record for
ideating and delivering innovative approaches to solving business problems. Proven leadership skills, with a collaborative work style. Looking to join a diverse, dynamic, goal-oriented team to drive success in the organization.

FUNCTIONAL EXPERTISE

- Data Science, Data Analysis
- Machine Learning, Deep Learning: end-to end model building
- ETL pipelines
- Explainable AI
- Web Services Design
- UX, CX Design
- Natural Language Processing
- Chatbot Design, Conversational AI
- Data Product Management
- Product Analytics
- Business Intelligence and Reporting

DOMAIN KNOWLEDGE

- Revenue Management (Airlines, Cargo, Hotels, Trains, Buses, Retail)
- Supply Chain Management
- Logistics Optimisation
- Manpower Planning
- Predictive Analytics and Forecasting
- Operations Research

PORTFOLIO

- **Github:** kavithacd
- **Medium:** https://cervio.medium.com/

WORK EXPERIENCE

Senior Product Specialist
HCL Technologies | Hyderabad, India| Jun 2018 - Present

- Built an End-to-End **Smart FAQ bot** along with Question-Answer-extraction from raw documents: achieved **33% improvement in accuracy** as compared to existing bot.
- Created the Production code for the Web-service APIs for the chatbot which can search through a knowledge base of 2,00,000 records within 0.5 sec.
- Built a **Tree-based LIME model** for explaining black-box models. This model is **robust to non-linear decision boundaries** as opposed to Linear LIME.
- Conceptualised a universal, **language-agnostic** AI model explainer. **Built the MVP and productised it in 6 weeks.**
- Built an **intelligent IT ticket assignment model**, which improved the ticket assignment accuracy from 40% to 65%
- **Identified Northstar Metric and low-level KPIs for Capacity Forecast** dashboard redesign: **60% less clicks required**
- Designed a dashboard for Airline Disruption Management with intelligent re-assignment of capacity from cancelled flights: **well received by existing and 70 potential clients**
- Headed the transition of Overbooking module to Machine learning Framework, **reducing offloading risk by 20%**
- Rectified **inconsistent marginal values of 40% of the network** increasing hurdle rate accuracy by 33%
- Led implementation of a custom enhancement to **improve hurdle rate calculation by around 15%**
- Led algorithm specifications, model evaluation and performance testing for our microservice product. **Reduced testing time by close to 30%**
- Provided accuracy and reporting script for performance of the microservice product, **reducing the QA's effort by 25%**

Transaction Risk Analyst - Buyer Risk
Amazon | Hyderabad, India| Oct 2012 - Apr 2013

- Handled digital, retail orders from US, Canada, EU, UK
- Surpassed target of resolving 16 cases per hour, successfully resolved 22 cases per hour with an **accuracy of 99.2%**

OTHER PROJECTS AND HACKATHONS
Market Entry Strategy for Indian Custom Printing Industry

Amazon Development Centre | 2014
- Discovered **INR 8 bn market** potential in India
- Proposed **3 business models** for entering into the Indian market
- Identified 2 potential partners: **finalised partnership with one**

TECHNICAL EXPXERTISE

- Python: Scikit-learn, Tensorflow, Keras, Pandas, Numpy, PySpark.MlLib, Elastisearch, Pytorch
- Deployment: Flask, Streamlit
- Big Data: Spark, Hadoop, Kafka
- Oracle SQL, SparkSQL, SQLite
- MS Excel
- Optimisation model: IBM CPLEX, PuLP
- Version Control: Git, GitHub
- Deployment: Flask, Streamlit

AWARDS AND CERTIFICATIONS

- GRE 2018: Overall 327/340 (Quant: 168/170, Verbal: 159/170)
- IELTS 2018: Overall 8.5/9 (Listening:8.5, Speaking:8.5, Reading:8.5, Writing:7.5)
- "Spot Award": Enhancing Overbooking module, JDA-HCL (July 2019)
- "Spot Award": Redesigning UI workflow, JDA-HCL (November 2019)
- Consulting Project (Client-Amazon): Market entry strategies for customised printing business in India. Client Rating 10/10 (January 2015)

LANGUAGES SPOKEN

- English (CEFR - C2)
- French (DELF - B2)
- Japanese (JLPT - N4)
- German (Basic)
- Spanish (Basic)
- Korean (Basic)
- Hindi (Native)
- Telugu (Native - Bilingual)
- Kannada (Native - Bilingual)

Using Gamification to improve user engagement and retention (fitness app) - Hackathon

Curefit | July 2020
- Performed market research and competitor analysis
- Proposed 2 **implementation strategies** for user engagement
- One of the strategies is **currently implemented in the App**

Hack the crisis Sweden - Hackathon

Government of Sweden | Apr 2020
- Ideated a skill-matching app for job search in the Swedish market
- **Developed the core algorithm** for job-skill matching
- Validated the model and advised on **productionising**

EDUCATION

University of Texas at Austin
Masters in Artificial Intelligence and Machine Learning | July 2020

Duke Corporate Education
Postgraduate Certificate in Product Management | March 2020

Indian Institute of Management Ahmedabad
Ahmedabad, India
Ph.D. in Production and Quantitative Methods | Mar 2018

Thesis: Essays on Online Hyperlocal Foodservice Marketplaces

University College of Engineering, Osmania University
Hyderabad, India
Bachelor of Engineering, Biomedical | May 2012

- Department Rank 3
- Graduated First Class with Distinction

CONFERENCE PRESENTATIONS

- Distribution network design for a Quick Service Restaurant-Food Aggregator", at 19th **International Symposium on Inventory Research** (Budapest, Hungary, 2016)
- Vehicle Routing for Online Hyperlocal Foodservice Marketplaces: A Constraint Programming Approach" at **EURO VeRoLog conference** (Amsterdam, The Netherlands, 2017)

CONTACT

Phone:+91-9558933207
Email: kavithacd@iima.ac.in
LinkedIn:
https://www.linkedin.com/in/kavitha-chetana-didugu/