### NIDHAL SATOURI

## ANALYTICS SPECIALIST | SOFTWARE ENGINEER | FULBRIGHT ALUMNUS

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#### **EDUCATION**

# **BOWLING GREEN STATE UNIVERSITY (BGSU)**

Master of Science, Analytics [GPA: 4/4] Scholarship: Fulbright Foreign Student Program Bowling Green, OH - USA

Aug 2015 - Aug 2016

## NATIONAL INSTITUTE OF APPLIED SCIENCE AND TECHNOLOGY (INSAT)

National Engineering Diploma, Software Engineering [GPA: 3.65/4]

Minor: Management of Information Systems

Tunis, Tunisia

Sep 2010 - Jun 2015

# SKILLS

## **METHODS & CONCEPTS**

- Programming: Algorithms, OOP, Design Patterns, Continuous Integration, SCRUM
- Analytics: Data Modeling, ETL, Predictive Modeling, Statistical Analysis, Time Series Analysis, Association Rules, A/B Testing, Hypothesis Testing

#### **SOFTWARE TECHNOLOGIES**

- Programming: Python, R, SQL, Java, C++, Shell Script, Git
- Big Data: Hadoop (MapReduce), Spark, Impala, Hive, Cassandra, AWS
- Analytics: MS Excel, SAS-EMiner, Tableau, Talend (DI/ESB)
- Mobile/Web: iOS, PHP, JavaScript, J2EE, .NET

## RELEVANT PROJECTS

### **ANALYTICS RESEARCH PROJECT - BGSU**

Sep 2015 - Apr 2016

- Led exploratory data analysis on 2 Parkinson's tele-monitoring (dysphonia) datasets using R
- Implemented and optimized predictive models like Logistic Regression, Decision Tree, Gradient Boosting and Neural Networks to simplify Parkinson's diagnosis using SAS-EMiner
- Evaluated the models' performance and compiled the analysis results in a research paper

#### **BIG DATA PROJECT - BGSU**

Mar 2016 – Apr 2016

- Cleansed 40 years worth of data (15 billion observations) from the US National Climatic Data Center on Cloudera CDH 5.5
- Automated the data retrieval, consolidation and loading into Hive Metastore and HDFS (Hadoop) using a shell script
- Coded SQL queries in Impala and built Linear Regression and Time Series models in Python using the following libraries: numpy, pandas, scipy, matplotlib, statsmodel, impyla

#### DATA MINING PROJECT – BGSU

Mar 2016 - Apr 2016

- Cleaned and transformed 10 years of road accidents' data from the Transportation Safety Board of Nebraska using SAS-EMiner and Excel
- Run statistical analysis, predicted the probability of an accident given the city section characteristics and generated Association Rules about co-occurring factors leading to accidents
- Visualized the insights in Tableau and delivered recommendations for a better safety plan

## **WORK EXPERIENCE**

### **BULLDOZER INC** Web Development Intern

Implemented the backend of a professional social network dedicated to the fashion industry

Tunis, Tunisia Feb 2015 - May 2015

- Architected and built a RESTful API that will be consumed by back-office and mobile applications
- Learned and practiced the SCRUM agile method

## **ORANGE** Mobile Development Intern

Performed a market research on photo editing and sharing mobile apps

Tunis, Tunisia Jul 2014 – Aug 2014

- Led the development of a social all-in-one iOS app (Selfie Maker) offering advanced features like Voice Recognition, Face Detection, and Photo Editing
- Contributed to the launching campaign by building the landing page, and helped in shooting a promotional video

#### FLAG ENGINEERING Mobile Development Intern

Built an m-commerce iOS app for a retail client providing the main following functionalities: products catalogue, user account setting, cart management, and payment

Djerba, Tunisia Jun 2013 - Aug 2013

Created a set of PHP/MySQL web services

# **PROFESSIONAL DEVELOPMENT**

- Python for Data Science DataCamp [MOOC] Aug 2016
- Big Data on Amazon Web Service Quest QwikLabs [MOOC] Mar 2016
- SAS Analytics Conference (Las Vegas, USA) Oct 2015
- Microsoft Technology Associate: Database Administration Fundamentals Microsoft [CERTIFICATION] Jun 2011

# **\*** VOLUNTEER EXPERIENCE

#### **NETLINKS CLUB – INSAT** Technical team member

Led iOS development trainings and projects

Jan 2012 – Sep 2014

Tunis, Tunisia

Participated in organizing national technology events (NetlinksDay 2012,2013 and 2014)

## TUNISIAN RED CRESCENT Volunteer and First-Aider

Ariana, Tunisia

• Helped in collecting donations for deprived families

Sep 2012 – Feb 2015

Participated in road safety campaigns

# **Q** LANGUAGES

English(Fluent), French(Fluent), Arabic(Native), German(Basic)

## INTERESTS

Coding & Data Science challenges, Computer Games, Graphic Design, Soccer, Basketball, Hiking