# M.Bilal Khan

Bachelor's in Computer Science FAST-NU, 2020

**PROLEADSOFT** 

## BS(CS) Graduate, Data Enthusiast

### **PROFILE**

I have very keen interest in the domain of Data Science, WebDev, Neural Networks and I constantly try to have hands on experience in Time Series Analysis. I know my way in and out of a Linux system, I am always breaking and repairing my Linux and I have a keen interest in scripting, both Web and OS based.

I try to automate any task that I can, I like developing, and I have a handful of experience on Python and its frameworks; C++ is my go to for more traditional processing and applications. Additionally, I also have a exposure to CI/CD with respect to dockerizing apps and AWS DevOps

## **WORK EXPERIENCE**

**Proleadsoft Software Engineer** [June 2020 – Present]

- Working at Proleadsoft as a Full Stack Developer.
- Particularly focused on the MERN Stack and MEVN Stack.
- Specifically I have been developing backend routes in express.js and consuming them through front end in react.js

### NOTABLE PROJECTS WORKED ON

### ATM Cash Prediction Using Time Series Approach

Final Year Project

As a part of this, a research has also been published in IEEE Computer Society Journal. Python notebooks implemented on real time ATM transactions to predict future withdrawals. Website developed in Django and Vue.js with Plotly Dash dashboards.

#### Sarcasm Detection Application

Artificial Intelligence

This project involved semantic analysis on English sentences using Support Vector Machines and Natural Language Processing. Fully coded in Python with the front-end achieved through wx-Python.

Deep Learning for Perception

BlockV: Peer to Peer Ride Sharing Service

Blockchain and Cryptocurrency

A blockchain enabled peer to peer ride sharing service running on the ethereum network with live transaction mining and ether payment facility, metamask wallet and escrow enabled. contracts written in Solidity with a React.js frontend.

#### **CPT** Website

WordPress website

Centre for Professional Training CPT is an initiative at FAST University to offer short courses on student development. Tasked with the official website, I used WordPress 5.1 to achieve completion within a few days. Website is live and can be viewed at http://cpt.khi.nu.edu.pk/

#### **CERTIFICATIONS**



Python REST APIs with Flask, Docker, MongoDB, and AWS DevOps - June 2020



Interactive Python Dashboards with Plotly and Dash - April 2020



Time Series Analysis in SQL Server – Mar 2020



Data Processing in Shell -Mar 2020



Data Visualization with Seaborn - Mar 2020



Introduction to Statistics in Spreadsheets - Mar 2020



Joining Data in SQL - Mar 2020



Supervised Learning with scikit-learn - Feb 2020



Cleaning Data in Python - Feb



Julia Scientific Programming -Mar 2020



Deep Neural Networks with PyTorch - Feb 2020



Neural Networks and Deep Learning - Nov 2019



Web Development - April



Multi feature detection of a large set of satellite imagery using Unet and Resnet-50 implemented in Python with the power of google collab.

#### **EDUCATIONAL BACKGROUND**

• BS Computer Science – National University of Computer & Emerging Sciences,

Karachi, Pakistan 2016-2020

• F.Sc Pre Engineering — DJ Sindh Government Science College,

Karachi, Pakistan 2014-2016

#### COMPUTER SCIENCE SKILLS

#### **SCIENTIFIC PROGRAMMING**

PyTorch, Julia

#### **SCRIPTING**

HTML, CSS, Django, Vue.js, Bash, Solidity, Bootstrap, LATEX, Node.js, PHP, Web3.js, React.js

#### **PROGRAMMING**

Python, Java, C#, C++, C, Flask, RESTful API, Docker

#### **DATABASE & QUERYING**

MySQL, Oracle, MongoDB, PostgreSQL, Workbench

#### SYSTEM SECRUITY

Parrot Security OS

#### **DESIGNING & EDITING**

Photoshop, GIMP, Filmora, KDenlive

#### **GAME PROGRAMMING**

Unity Game Engine

#### **PUBLICATIONS**

M. Rafi, M. T. Wahab, M. Bilal Khan, H. Raza. (2020). 2020 3rd International Conference on Computing, Mathematics and Engineering Technologies (iCoMET). ATM Cash Prediction Using Time Series Approach: 7281-4970.

#### **SKILLS & INTERESTS**

#### Dedicated Volunteer

Looking for an opportunity to volunteer. Never say 'no' to anyone and always give back.

#### Captivated & Productive

Among a huge list of skills FAST has taught me is to be always doing something and be able to say "Yea! I did that".

#### Eager to Learn more

I'm always looking for an adventure, opportunities to learn something new and utilize them for my personal and professional carrer.

#### EXTRA CURRICULAR ACTIVITIES

### The Literary Club Sept 2017 – Sept 2019

- Head of the Public Speaking Club
- Hosted multiple events
- Videographer
- Content Writer

### The Web Masters Sept 2018 – Sept 2019

• Co-Head Back End Development

### Mukhlis Fertigo Aug 2018 – Aug 2019

- Head IT Team
- Web Developer

#### **COMPETITIONS**

#### Computer Science

- Speed Coding
- Database Design
- Speed Debugging
- Web Hunt

#### Speaking/Declamation

- National Cabinets
- The Grand Debate
- Agha Hassan Abedi