William Scott Paka

MT18026, Email: william18026@iiitd.ac.in
williamscott701.github.io
DOB: July 20, 1994
Address: 4-285, Old Gaigolpadu, Kakinada-5, AP. Pin: 533005

Profile Statement

Successful professional with 2 years of work experience as "**Head of Development**" in a start-up, leading a highly skilled team of 8+ employees and interns in building a robust Spring MVC e-commerce application. Enthusiast in **Data Science**, being the only one to have done courses **AI, ML, DL, IR** together in **AI Specialization**, having developed solid quality projects in those fields. **Published a paper** on "Multitask Learning for Black-market Tweet Detection". Current research works include developing a **Novel Topic Based Generative Model** to find topic-sentiment distributions in the given text. Successful in intense and demanding environments, providing decisive team leadership with a track record of being highly motivated and goal oriented.

Education

IIIT, Delhi	CGPA: 8
M.Tech (CSE – Artificial Intelligence)	(till IInd Semester)
2018 – 2020 (May)	
Karunya University, Coimbatore	CGPA: 8.2
B.Tech (CSE)	
2012 – 2018	
Narayana Junior College, Kakinada	Percentage: 86.8
Intermediate (Board of Intermediate Education, Andhra Pradesh)	
2016 – 2018	
Nalanda Vidya Niketan, Kakinada	Percentage: 83
SSC (Board of Secondary Education, Andhra Pradesh)	
2015 – 2016	

Skills

Expertise Area	Machine Learning, Deep Learning, Artificial Intelligence, Natural Language Processing, Web Development
Programming Language	Python, Java, C++
Tools and Technologies	PyTorch, Keras, Tensorflow, OpenCV, NLTK, Sklearn, Flask, J2EE, Spring MVC, Angular, Git, Ionic
Technical Electives	Artificial Intelligence, Machine Learning, Deep Learning, Information Retrieval.

Certifications

- **Machine Learning** Certified in **Stanford University** Coursera Course by Andrew NG.   (Feb, 19)
- Improving **Deep Neural Networks**: Hyperparameter tuning, Regularization and Optimization – **deeplearning.ai**   (Mar, 19)
- Applied AI with Deep Learning – **IBM**   (Ongoing)

Work Experience

Covenant IT Solutions Pvt Ltd   (Mar,16 – Oct,18)

Position: Head of Development – Full Time

Worked as '**Head of Development**' in our *start-up* **Covenant IT Solutions Private Limited** efficiently leading a team of 8+ employees and interns, in building a robust and stable online e-commerce with technologies such as Spring MVC, IBM Bluemix Cloud, Angular and many others.

Karunya University   (Jul,14 – Jul,15)

Position: Web Designer and Developer – Part Time

Worked as **Web Designer and Developer** at Computer Technology Centre, Karunya University under "Earn While You Learn Scheme" for a fixed stipend. Responsible in building and maintaining dynamic websites for events and departments.

Internship

Topic Modelling – United Health Group (Optum)   (Apr,19 – Aug,19)

Guide: Dr. Suman Roy, Director Data Science, Optum.

In this research project we aim to develop a **novel LDA based topic modeling approach** for analysing topic-sentiment jointly with topics and sentiments. We will be producing two papers and a patent from this work.

Campus Network (Guest Access Solution) - Kakinada Seaports LTD.   (Jun,14 – Aug,14)

Guide: Pardha Raju, Sr. Manager – IT, KSPL

This project is to Design a guest access solution to provide network access to visitors segregating the traffic from the internal network using web-based authentication with full auditing of location, MAC, IP address, username.

Paper Publications

- **Multitask Learning for Blackmarket Tweet Detection, ASONAM 2019**   (Aug,19)

Projects / *Research

*Sluice Network on Multi Task Learning to Detect Blackmarket tweets   (Dec,18–April, 19)   Team Size – 2

Guide: Dr. Tanmoy Chakraborty, IIITD

In this project we implemented Multitask Learning model using cross stitch units to detect tweets that are posted in blackmarket. We used primary task to be detection of blackmarket tweet and the second task is to predict the likes and retweets of the tweet. This work is **published in Asonam Conference, 2019**.

Individual Primate Identification using facial features   (Jan,19 – May,19)   Team Size – 3

Guide: Dr. Saket Anand, IIITD

In this research project we explored ways to identify individuals in Monkeys and Macaques which is considered a difficult problem statement. We have implemented few of the solutions in which we can learn a pair wise loss using KL Divergence. We have performed the tasks on **classification, open set and closed set** and compared the results.

Code Retrieval based on Weighted Similarities of Control Flow & Structure (Jan,19 – May,19) Team Size – 3

Guide: Dr. Tanmoy Chakraborty, IIITD

In this project we aim at suggesting the user the relevant answer from stack overflow by using textual and code similarities from query. We made the **first attempt** to make use of the adjacency matrix of the codes' **Control Flow Graph** to find multiple similarity measures that can be used together to find a similarity measure.

Sentiment Analysis to Classify Online Abuse (Jul,18 – Dec,18) Team Size – 3

Guide: Dr. Saket Anand, IIITD

In this project we explored few **Deep Learning techniques** to detect and classify abusive comments. Dataset: Wikipedia detox, Twitter. Achieving F1 ~ 85%.

2048 vs AI (Jul,18 – Dec,18) Team Size - 2

Guide: Dr. Mayank Vatsa, IIITD

In this project we implemented and compared **multiple AI models** which can play the game 2048 to make the maximum score. AI Models: Search Algorithms, RL, NN and NN+RL. Our search algorithms even exceeded the Stanford paper results.

Web Based Enterprise Application for E-Commerce (Jun,15 – Mar,16) Team Size - 4

Guide: Dr. R. Elijah Blessing, Director Collaborations, Karunya University

Stipend: Rs 20,000 – 30,000 / month (1 dollar per hour paid monthly)

Worked as, a 'Software Engineer' on a part-time basis for a consultancy project on 'Java web development' for a US based company.

Minor ML/DL Projects

- GANs with Gumbel Softmax for text.
- **YOLO PyTorch** – Object Detection and Classification (Real Time)
    - **Complex** Forest Animal Dataset
- SOTA **EfficientNets** (Transfer Learning)
- **AutoEncoders** for Faces
- **LSTM** for sequential audio data classification
- **Neural Networks** from Scratch – (MNIST Dataset)
- Linear Regression from Scratch – (Boston Housing Dataset)
- Logistic Regression from Scratch – (MNIST Dataset)
- SVM Classification – Hindi Handwritten Digits
- Alexnet in PyTorch – CIFAR Dataset

Positions of Responsibility

- **Authorised Publisher** for TDS - **Towards Data Science**, a premium of **Medium** for Data Science field in AI, ML, DL, IR domains. (Feb, 19 – Till Date)
- Team Member of **IIITD Lab – Data Science (LCS2)** with researches including Collusion Detection, Topic Modeling. (Dec, 18 – Till Date)
- **Additional Director and Authorised Signatory** for start-up "Covenant IT Solutions Pvt Ltd" (Jan, 18 – Till Date)
- **Head of Development** for start-up "Covenant IT Solutions Pvt Ltd" efficiently leading a team of 8+ employees and interns. (Mar, 16 – Oct, 18) (Mar, 16 – Mar, 17)
- **Senior Residential Advisor** in Boys Hostel, Karunya University
- **Student Coordinator** for Photoshop event named 'Picster' for a (Mar, 15)

National Level Technical Symposium in Karunya University.

- **Website Admin** for TECHAGON'15, a National Level Technical (Mar, 15) Symposium organized by Department of CSE, Karunya University
- **Website Admin** for MAD (Making A Difference) Event by Dove (Aug, 15) Department, Karunya University.

Awards and Achievements

- Ranked **14,** in **Hard** level Hacker Rank **Machine Learning Challenge** – Guess the Flipkart Query
- **2nd prize** in COD++ (2015), a coding Event at a National Level Technical Symposium 'Expertise 2k15' Conducted by Department of IT, Karunya University.
- **2nd prize** in 'King Coders' (2016), a coding Event Conducted by **'Computer Society of India** - Karunya Student Branch' in Karunya University.
- Received **grade 10/10 in all programming labs** (Java Programming Lab, Cryptography and Network Security Lab, Web Technology Lab and, Digital Design Lab) and 9/10 in all the other major labs.

Interests and Hobbies

- Photography
- Graphic Designing

Declaration: The above information is correct to the best of my knowledge.
William Scott Paka
Date: 23 07, 2019