Dhiren Devinder Serai

https://dhirensr.github.io
Github : https://github.com/dhirensr
Email : dhirensr@gmail.com
Mobile : +49-17676487579
Linkedin :https://www.linkedin.com/in/dhiren-serai-16409b114

Education

- **University of Stuttgart** — Stuttgart, Germany
  Master of Science in Computer Science; GPA: 2.5/4.0 — *October. 2018 – December. 2020*
- **Mumbai University** — Mumbai, India
  Bachelor of Engineering in Computer Science; GPA:8.11/10.0 — *June. 2013 – July. 2017*

Experience

- **Institut für Maschinelle Sprachverarbeitung** — Stutgart,Germany
  Master Thesis Student — *June 2020- December 2020*
  - **Quantization of Automatic Speech Recogniton (ASR) networks**: The main goal of this thesis is investigation of quantized neural networks for end-to-end speech recognition systems. Different quantization methods like post training quantization, scalar quantization, iterative product quantization and quantization aware training are investigated in this thesis on ASR model.
  - **Technology Stack used in the project**: Python3 , Pytorch (for training models), ESPNET ASR toolkit
- **Diconium GmbH** — Stutgart,Germany
  Student Developer/Werkstudent — *August 2019- December 2020*
  - **DL models in embedded devices**: I worked at Diconium as Software Developer where my task is to deploy various Neural network models like emotion recognition, object detection(Yolo V3) on an embedded device like Amazon Deeplens and apply transfer learning on state-of-the art models for making it work for employee detection inside the company
- **Google Summer of Code 2019 and 2020** — Remote
  Student Developer at OWASP Organization — *April 2020 - September 2020*
  - **GSOC**: I worked with OWASP organization with the help of Google in Google Summer of Code 2019.My task was to automate the honeypot process completely from scratch, improving the frontend dashboard of the project and also designing REST API's in Flask that would be consumed by the frontend.
  - **Technology Stack used in the project**: Python3, Javascript, HTML, CSS, Flask (for designing REST API) and Docker
- **Mindseed** — Mumbai, India
  Software Engineer — *June 2017 - July 2018*
  - The technologies I worked on are **Clojure , Clojurescript and Python (Django framework)**.
  - I also worked on Cordova for developing a hybrid mobile application using Reagent (Facebook React + Clojurescript)
- **Summer Internship at AUC** — Cairo,Egypt
  Intern at AUC, Egypt — *June 2016- July 2016*
  - **Internship**: I worked as a PHP Developer for 2 months in the university and developed a web-portal for them.I worked on Drupal 8. The portal is for students who are receiving concession, so the applications consisted offorms, upload pdfs, upload images could be automated.

Projects

- **Finance Samachar - Android Application**: I made an android application using Flutter for latest Indian financial and market news aggregated in one place and live TV finance news. It's been published on Playstore.
  Technology stack used : **Flutter, Flask (for designing API), Heroku (for deployment)**
- **Finance Samachar - VueJS Frontend**: I made a website for latest Indian financial and market news aggregated in one place and live TV finance news. It's available on Finance Samachar.
  Technology stack used : **Vue.js, HTML, CSS, Bootstrap, Javascript, Flask (for designing API), Heroku (for deployment)**

- **COVID-2019 Dashboard**: I made a dashboard for visualization and facts regarding the COVID-2019 Indian data. Demo of the same is available at : COVID-2019 dashboard.
  Technology stack used : **HTML, CSS, Javascript, Bootstrap.**
- **YoGan**: Generative adversarial network for Yoga Text Description to Image. Implemented in Tensorflow with Keras Backend.
- **Image Classification on Mobile using Tensorflow Lite and React Native**: I have created a prototype where I was able to infer from MobileNet V1 deep learning model on mobile in real time using Tensorflow lite and React native.

Research Experience

- **Proposed System for Sign Language Recognition**: Proposed System for Sign Language Recognition - Presented at 2017 International Conference on Computation of Power, Energy,Information and Communication (ICCPEIC) sponsored by IEEE Madras Chapter. ISBN- 978-1-5090-4324-8
- **Prediction of Air Pollution with Machine Learning**: Presented at the BTW Conference 2019 in Rostock https://btw.informatik.uni-rostock.de/download/workshopband/G2-4.pdf

Programming Skills

- **Languages**: Python3, Javascript, Java
  Databases: MySql, NoSQL (MongoDB)
  Frameworks: Luminus (Clojure), Django, AngularJS, VueJS
  Others: OpenCV, Tensorflow, Keras, Scikit-Learn, Scikit-image