

Uma Subbiah

University of Oxford, Keble College, Oxford, OX1 3PG

LinkedIn: [linkedin.com/in/uma-subbiah1](https://www.linkedin.com/in/uma-subbiah1)

Website: uma-subbiah.github.io

Email: umasubbiah19@gmail.com

Mobile : +44 7895617887

Github: github.com/uma-subbiah

Google Scholar: bit.ly/UmaSubbiah

Education

- **University of Oxford** Oxford, UK
Master of Science in Computer Science Oct 2020 – Sept. 2021
- **Amrita Vishwa Vidyapeetham** Coimbatore, India
Bachelor of Technology in Computer Science & Engineering Jul 2016 – Jun 2020
GPA: 9.91/10, 1st Class with Distinction, Batch Topper, Gold medallist

Experience

- **Developer Student Club by Google Developers** Coimbatore, India
Lead Jan 2019 – Jul 2020
 - Conducted over 7 workshops & hackathons to promote students' technical interests. Invited to (and sponsored to attend) the India DSC Summit by Google Developers at Goa, India
- **IIT Madras Research Park** Chennai, India
Intern May 2019 – Jul 2019
 - Artificial Intelligence: Developed a prototype for predicting the presence/absence of chronic kidney disease inpatients, using case-based reasoning in artificial intelligence.
- **Leeds Beckett University** Leeds, UK
Research Intern Feb 2018 – July 2018
 - Machine Learning: Conducted research on the use of Machine Learning as a Cloud based service to aid software bug prediction. This work was presented at a conference in Portugal and subsequently published. – please see publications
- **Smart Spaces Lab, Amrita Vishwa Vidyapeetham** Coimbatore, India
Undergraduate Student Researcher Sep 2017 – July 2020
 - Deep Learning, Computer Vision: Worked on object detection & my findings - 'An Extensive Study and Comparison of the Various Approaches to Object Detection using Deep Learning', were published by IEEE.
- **Seyyone Software Technologies** Coimbatore, India
Internship on Retrieval-Based chatbots using machine & deep learning techniques Nov 2017 – Jan 2018

Awards, Honours & Certifications

- Google Developers Certified TensorFlow Developer & Member of the TensorFlow Certificate Network Jul 2020
- Graduated with the highest GPA, First Class, Distinction & Gold medal - B.Tech, Amrita Vishwa Vidyapeetham 2016 – 2020
- School topper in the 10th and Topper of the Science Stream in 12th Board exams 2014 & 2016

Select Projects

- **B.Tech Final Project:** Worked on the analysis and enhancement of deep learning architecture- please see entries 2 and 3 under Publications. Extensively used knowledge gained from completing deeplearning.ai's Deep Learning Specialization.
- **IBM's Data Science Specialisation - Capstone Project:** Finding the Optimal Location to Establish a New Hospital in London, using data science and machine learning, in terms of number of people who will be benefitted, security and accessibility.
- **Fuzzy Logic based Heart Disease Predictor:** A user-friendly Mamdani Fuzzy Logic System to predict the presence of heart disease using soft computing techniques. Project done using Python, scikit-fuzzy and matplotlib.

Programming Skills

- **Technologies:** Machine & Deep learning, Tensorflow, Keras, Pandas, Data Analysis and Visualisation
- **Languages:** Java, Python

Extra-curricular Activities

- An avid traveller and Creative Writing Blog: thegoldenaurora.wordpress.com
- Served as School Head Girl, Student Editor and Vice-Captain in school, also volunteered as a Road Safety Patrol cadet in school.
- Volunteer Work: Currently working with the Zooniverse project 'Snapshot Serengeti' to contribute to open source research. Volunteered at events for the Coimbatore Cancer Foundation.

Select Publications

(i) Book Chapter

1. Jan 2020, Springer **Subbiah, U., Ramachandran, M. & Mahmood, Z.,** 2020. Software Engg. Framework for Software Defect Management Using Machine Learning Techniques with Azure. In Software Engg. in the Era of Cloud Computing (pp. 155-183). Springer

(ii) Conference Proceedings

2. Sept 2020 IEEE **Subbiah, U., Kumar, R. V., Panicker, S. A., Bhalaje, R. A., & Padmavathi, S.** (2020, July). An Enhanced Deep Learning Architecture for the Classification of Cancerous Lymph Node Images. In 2020 2nd ICIRCA (pp. 381-386). IEEE.
3. Jun 2020 IEEE **Subbiah, U. and Padmavathi, S.,** 2020, February. Analysis of Deep Learning Architecture for Non-Uniformly Illuminated Images. In 2020 International Conference on Inventive Computation Technologies (ICICT) (pp. 38-43). IEEE.
4. May 2020 Springer **Subbiah, U. and Jeyakumar, G.,** 2020. Soft Computing Approach to Determine Students' Level of Comprehension Using a Mamdani Fuzzy System. In Intelligent Systems, Technologies and Applications (pp. 103-115). Springer, Singapore.
5. Jan 2019 Scitepress **Subbiah, U., Ramachandran, M. and Mahmood, Z.,** 2019, January. Software engg. approach to bug prediction models using machine learning as a service (MLaaS), in Proceedings of the 13th ICSoft 2018 (pp. 879-887).
6. Accepted: 2020, IEEE **Subbiah, U., D. Kavin Kumar, Thangavel S. K, P. Latha:** An Extensive Study and Comparison of the Various Approaches to Object Detection using Deep Learning: Presented: Intl. Conf on Smart Systems and Inventive Technology, IEEE