Greetings,

Please accept the enclosed resume as my application for Research Software Engineer position advertised at Max Plank Institute Tubingen’s website. I came to know about this position through your Facebook page. I hold a Master’s degree in Computer Science, majoring in Cognitive Technical Systems with a CGPA of 1.4, from University of Freiburg and currently working as a Software Engineer in Automotive Industry. Given my background in machine learning and computer vision, experience in academic and corporate research and expertise in software development, I believe that I can make effective and useful contribution through this role.

As stated in my enclosed resume, I have 2 years + experience of professional software development. I am proficient in C++, Java, MATLAB and Python. I have contributed to various projects with my problem solving skills, encompassing applications across various domains. Previously, I have worked extensively with development of web and cloud-based mobile applications. I am also familiar with computer graphic libraries like DirectX and OpenGL, network applications using cloud-server and peer-to-peer architecture and using operating system concepts like multi-thread and multi-processing. Along with using Machine Learning frameworks, I am also experienced in development of ML frameworks, with contribution to Auto-Weka and Caffe repositories. Being hands on with the principles of software engineering, requirements gathering and software testing, I can adapt to new technologies, programming languages and frameworks and prepare prototypes and proof of concepts fairly quickly.

During my Master Degree in University of Freiburg, I worked as a research assistant in Computer Vision Group chaired by Prof. Thomas Brox and the Machine Learning Group, chaired by Dr. Frank Hutter. This allowed me to collaborate with many top researchers in academia and gave me valuable knowledge in the areas of machine learning and computer vision. It also allowed me to gain hands on experience on the state-of-the-art tools in the respective domains. As stated in my resume, my Master’s Thesis was carried out at Robert Bosch GmbH with Artificial Intelligence and Autonomous Driving research groups, where I gained valuable experience in corporate research. During this period I also participated in reading groups to keep myself at par with the research in AI. During my Master’s Degree, I participated in Seminars, which aided me in developing the required skills for scientific writing, analytical and systematic analysis of research studies, presentation and organization of scientific research.

My coursework as a Computer Science Masters student at University of Freiburg revolves around Machine Learning, Artificial Intelligence and their applications in Robotics and Computer Vision. Given my interest, I have had extensive theoretical and practical knowledge of machine learning. I undertook courses of Statistical Pattern Recognition and Machine Learning and the practical course on Deep Learning. This aptitude is also expressed through my Master Thesis: Semantic Segmentation of 3D Point Cloud Data using Deep Learning. This thesis addresses 3D scene understanding task of perception in urban environment using 64-channel LIDAR sensor, performing 11-class end to end semantic point cloud segmentation using ConvNets. I am experienced with working with Caffe and Torch 7 for deep learning and Scikit-learn and Weka for more classical machine learning.

As reflected in my resume and career choices, I possess immense interest in AI and research in developing intelligent systems and I want to establish myself as a AI and/or ML practitioner in future. I believe the state of the art research conducted at Perceiving Systems at MPI Tubingen can provide the perfect environment for excelling and establishing a career as a research software engineer in machine learning and computer vision. Moreover, I believe that my diverse background and set of skills and expertise will be a good addition to MPI in contributing to various interesting projects. As mentioned in the job description, I am also familiar with using Amazon Mechanical Turk and Amazon Web Services as well. Language skills

Concluding, I believe I will be a suitable fit for this position and would be greatly interested in an opportunity to be interviewed. I want to thank you for taking time to review this application. I look forward to further correspondence.

Best regards,   
Farooq Ahmed Zuberi

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