Greetings,

Please accept the enclosed resume as my application for Allen AI Predoctoral Young Investigator Program advertised at Allen AI’s career website. I hold a Master’s degree in Computer Science, majoring in Cognitive Technical Systems with a CGPA of 1.4 ( out of 5, with 1 being the highest grade), from University of Freiburg, Germany 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 evident in my enclosed resume, I have more than 2 years of professional software development experience. This enabled me to contribute 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 working with computer graphic libraries, network applications using or writing web services for cloud-server architecture and using operating system concepts like multi-thread and multi-processing. Moreover, along with using Machine Learning frameworks, I am also experienced in development of ML tools, with contribution to Auto-Weka and Caffe repositories. Having worked with wide range of technologies in diverse domains allows me to adapt to new technologies, programming languages and frameworks and prepare prototypes and proof of concepts fairly quickly.

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 along the practical course on Deep Learning. This allowed me to gain hand-on experience with classical ML datasets and tools. This aptitude was further enhanced through my Master thesis: Semantic Segmentation of 3D Point Cloud Data using Deep Learning. This thesis addresses 3D scene understanding task of perception with 64-channel LIDAR sensor by using Convolutional Neural Networks. CloudSeg, a ConvNet, is proposed to perform 11 class point wise classification of LIDAR point clouds. CloudSeg is trained and evaluated on LIDAR data collected in urban environment for autonomous driving. Along with gaining hand-on development experience, this thesis allowed me develop intuition for designing and utilizing ConvNets for problem solving. I am experienced with working with Caffe and Torch 7 for deep learning and Scikit-learn and Weka for more classical machine learning.

During my Master Degree in University of Freiburg, I also worked as a research assistant in Computer Vision Group chaired by Prof. Thomas Brox and Machine Learning Group, chaired by Dr. Frank Hutter. This allowed me to collaborate with many top researchers in academia and gave me valuable knowledge about the best practices of academic researcher in the areas of machine learning and computer vision. 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 and presentation and organization of scientific research.

Why Phd ?

* Logical progression of career requires a Phd to build upon the interest and experience
* Looking for a platform to conduct state of the art research and establish one self as a researcher in AI

and how this program will help me with ideal phd?

* Competitive research for
* Future research motion planning robotic perception and development of real intelligent/smart

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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