Research Assistant (m/f)

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Recruitment Officer Chair of Building Realization and Robotics, TUM Munich, DE

Hello Sir,

This cover letter is in reference to the position of *Research Assistant* (m/f) that was advertised on your website which is also where I learned about this opportunity.

Being a Master-thesis student, it is my professional aspiration to seek a job that will allow me the flexibility to approach a problem theoretically and also, to ensure efficient software-implementation. I am keen on applying for this position since I believe it will fulfill this objective in my areas of interest and strengths. At the moment, I am engaged at Deutsches Zentrum für Luft—und—Raumfahrt for development of real time estimator with asynchronous vision-based measurements. This experience has given me a solid mathematical foundation in optimal state estimation approaches using delayed measurements, out-of-sequence measurements in event-driven systems. At the same time, I have also developed proficiency in very specific toolboxes in MATLAB/Simulink as mentioned in my CV. Additionally, I have also developed a deep understanding of the concept of observability in non-linear dynamic systems. To compliment my work experience, I have undertaken electives in the form of Machine Learning and Visual Navigation which has given me an overarching view of the mathematical approaches in solving state-estimation problems.

Prior to that, I had worked with Bosch as a software developer which gave me hands-on experience with IDEs: Visual Studio and Eclipse. This experience was further strengthened through working with low-level communication protocols: USB and Bluetooth; which also included some of my personal projects. My professional experience thus far has allowed me to go through several software development cycles while working with version control: SVN and GIT. My internship at National Instruments was focused on data acquisition using Virtual Instrumentation. Furthermore, I have strengthened my undergraduate overview of micro-controller architectures through conferences by Freescale.

As an undergraduate student of Electrical Engineering, I had developed a keen interest in Control Systems, Robotics and instrumentation. I have pursued this as a broad objective throughout my career; both academic and professional. I believe, this position under the Chair of Building Realization and Robotics at TUM will allow me to specialize in my interests. Also, my international experience gained as a student and professional will add to the diversity of your workplace. I believe that my ability to work with several programming languages and mathematical tools in your domain of work gives me suitable aptitude for the job. I would like to thank you for considering my candidature and I look forward to talking to you in person for more details about this job.

Sincerely yours,

Hrishik Mishra