Asadullah Hill Galib

PhD Candidate in Computer Science, MSc & BSc in Software Engineering

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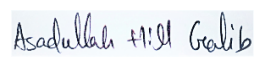

To whom it may concern,

I am writing to express my strong interest in the open position at your esteemed organization. As a PhD candidate in Computer Science specializing in Machine Learning, with a solid foundation in Software Engineering and a proven track record of multi-disciplinary research collaboration, I am confident that my skills and expertise can contribute advancing knowledge through innovative AI solutions. My experience and academic degrees present a unique blend of proficiency in deep learning, machine learning, statistics, and software engineering.

Currently pursuing my Ph.D. at Michigan State University, my research focuses on developing novel deep learning frameworks for modeling extreme events in time series and spatiotemporal data, incorporating Extreme Value Theory, self-supervised learning, representation learning, and generative modeling. I have gained diverse research experience and collaborated on multi-disciplinary projects under the supervision of Dr. Pang-Ning Tan, and I am actively engaged in pushing the boundaries of knowledge in my field. Prior to my doctoral studies, I earned my Master of Science (MSc.) and Bachelor of Science (BSc.) in Software Engineering from the Institute of Information Technology, University of Dhaka, Bangladesh.

My diverse experience extends to computer vision (including semantic segmentation, conditional translation, transformer models such as ViT and Swin, image classification, spatiotemporal modeling, etc.), natural language processing (involving transformer-based neural machine translation, word embedding, and topic modeling), generative modeling (covering GANs, VAEs, Diffusion Models, and Score-based Models), representation learning, self-supervised learning, unsupervised learning, and more. Additionally, I have applied my machine learning expertise to address challenges in software engineering and security domains, such as code-smell detection and malware detection. Complementing my academic achievements, I have acquired valuable industrial and research experience through internships in Software Engineering and Machine Learning Research. During my research internship at the Frontier Development Lab (FDL) by NASA and the SETI Institute, I collaborated with a cross-disciplinary team on a NASA challenge: Seismic Insight from Geomagnetic and Ionospheric Data. I have actively collaborated in addressing the challenge, conducting statistical analyses linking earthquakes to ionospheric changes. I developed machine learning and probabilistic models, built statistical tools, and created the first machine learning-ready dataset for this domain, resulting in 3 AGU abstracts, 1 NeurIPS workshop paper, 1 technical memo, and 1 NASA NTR, showcasing my dedication to advancing scientific understanding and practical solutions.

In summary, my commitment to groundbreaking research, coupled with a diverse skill set in machine learning, software engineering, and interdisciplinary collaboration, makes me a dynamic contributor to cutting-edge advancements. Thank you for considering my application. I am excited about the possibility of contributing my skills and expertise to your company and am eager to discuss this opportunity further.

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