To Whom it may concern,

With over 15 years of combined experience in academia and industry, in the field of computer science, I am passionate about contributing to an environment that fosters quality education and research, prepares students to navigate the challenges of a rapidly evolving technological landscape, and equips them for success in the job market.

Throughout my career, I have demonstrated a commitment to excellence in teaching and a passion for advancing the field of computer science. My portfolio encompasses many years of industry experience as a software programmer, where I consistently delivered products that exceeded client expectations. This foundation, combined with my academic journey—starting with a Teaching Diploma in Applied Mathematics followed by a Professional Master's and culminating in a PhD in Computer Science—has deeply influenced my teaching philosophy and methodology. I strive to produce students who are not only academically and theoretically strong but also well-prepared for the job market.

As a faculty member, I have taught a broad range of computer science courses, consistently earning positive feedback for my ability to demystify complex concepts and engage students in meaningful learning experiences. In addition to my teaching experience, my doctoral research focused on cybersecurity, static program analysis and programming language compilers, areas that have provided me with a deep and nuanced understanding of critical aspects of computer science. This research has not only enhanced my technical expertise but has also informed my pedagogical approach, allowing me to offer students a well-rounded and comprehensive education.

Beyond the classroom, I have extensive experience in the development of web and database applications, working with technologies such as Java SE, Jakarta EE, Spring Framework, .NET, C#, ASP.NET, MS SQL Server, and Crystal Reports. This practical experience enables me to bridge the gap between theoretical knowledge and real-world application, a skill I incorporate into my teaching to better prepare students for the demands of today's job market.

My academic background and research in cybersecurity, particularly in static program analysis and software development methodologies, have provided me with a solid foundation in both the theoretical and applied aspects of the field. My teaching experience at Maharishi International University has allowed me to refine my teaching strategies, focusing on student-centered learning that emphasizes active participation, collaboration, and real-world problem-solving. Additionally, I have been involved in curriculum development, contributing to the creation of new courses that address the latest trends in computer science and artificial intelligence.

Your commitment to excellence in education, diversity, and community service resonates deeply with my own values. I am dedicated to creating an inclusive and supportive learning environment where students from all backgrounds can thrive. I am excited about the possibility of contributing to this mission through my teaching, research, and community involvement.

I look forward to the opportunity to discuss how my background, skills, and experiences align with the needs of your institution and how I can contribute to your continued success. Please feel free to contact me if you require any additional information.

Sincerely,

Assad Maalouf, Ph.D. MSCS MCTS

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Teaching Statement

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I hold a Teaching Diploma in Science from the Lebanese University, a Master of Science in Computer Science from Maharishi University of Management, and a Ph.D. in Computer Science from Oakland University. This diverse academic background has provided me with a strong foundation in both the theoretical and applied aspects of computer science, significantly shaping my path as an educator. Beyond academics, my industry experience has also enriched my teaching philosophy, emphasizing the importance of preparing students to meet real-world challenges. This preparation is essential and critically important in an applied field like computer science. It is this combination of my diverse academic background and extensive professional experience that has shaped my teaching philosophy and approach.

Teaching Philosophy and Approach

At the core of my teaching philosophy is the belief that education should serve as a bridge between theoretical knowledge and practical application. The role of the educator is to effectively communicate complex theoretical concepts to students with clarity. I am convinced that true mastery of a theoretical topic is demonstrated by the ability to explain it clearly to anyone, using the right words and examples. Driven by this conviction, I strive to make complex, abstract concepts accessible to students by relating them to real-world challenges and experiences. For instance, when teaching web programming, I draw on my expertise in cybersecurity to illustrate the importance of security. I use practical examples to demonstrate how a strong theoretical understanding can be applied to secure distributed applications from malicious exploitation in today's digital world.

As an Assistant Professor of Computer Science at Maharishi International University, I have had the privilege of teaching a wide range of courses, including computer architecture, Java programming, web programming, software engineering, DevOps, microservices, and CI/CD. My approach to teaching these subjects is student-centered, focusing on active learning, hands-on projects, and fostering a collaborative learning environment. I encourage my students to think critically, solve problems creatively, and apply their knowledge in practical settings.

Conscious-Based Education and Student Engagement

Maharishi International University is the home of Consciousness-Based Education (CBE), with Transcendental Meditation (TM) at the core of this educational methodology. TM is a scientifically proven technique used as an active means of rest. It is well-known that a rested physiology

promotes sharper thinking and results in a brain ready for action. MIU incorporates group meditation into the curriculum, where students and teachers meditate together in the classroom as part of regular classes. This methodology creates a positive and supportive learning environment, enhancing students' ability to focus, reducing stress, fostering a sense of belonging, and promoting self-motivation. It also encourages a desire in students to emulate their teachers and grasp knowledge more easily and effectively. CBE has significantly influenced my approach to student engagement. I integrate these principles into my teaching, helping students not only absorb technical knowledge but also develop essential soft skills such as teamwork, communication, and mindfulness. These skills are crucial for their success both academically and personally, contributing to their overall self-accomplishment.

My role as an educator extends beyond the classroom. I am deeply committed to mentoring and advising students, guiding them through their academic and professional journeys. I take pride in helping students identify their strengths, set goals, and navigate challenges, all while fostering a growth mindset. Whether through office hours, one-on-one meetings, or group discussions, I am dedicated to supporting my students' academic and personal development.

Curriculum Development and Continuous Improvement

The field of computer science and technology, whether at the level of hardware or software, is ever-changing. Staying at the forefront of technological advancements is essential to equipping my students with the latest and most relevant information for the job market. I am constantly researching new technologies and current industry trends. Additionally, I actively participate in curriculum development to ensure that MIU's computer science program remains up-to-date with industry needs. My ongoing professional development includes attending conferences, engaging in online forums, and continuously learning about new technologies and methodologies. This commitment enables me to incorporate the latest tools and techniques into my courses, providing students with a cutting-edge education that prepares them for the rapidly evolving tech industry.

Impact and Vision

My ultimate goal as an educator is to empower students to become knowledgeable, innovative, and ethical professionals who can contribute meaningfully to the field of computer science. I am passionate about nurturing the next generation of computer scientists who are not only technically proficient but also capable of addressing the ethical and societal implications of their work.

Looking forward, I am excited to continue refining my teaching methods, exploring new ways to integrate emerging technologies into the curriculum, and contributing to the academic community. I am committed to making a lasting impact on my students, helping them achieve their full potential and preparing them to face the challenges and opportunities of the future.

Research Statement

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My research focuses on the intersection of cybersecurity and static analysis, a specialized area of computer science that is crucial for ensuring the reliability and security of software systems. I completed my Ph.D. at Oakland University in Michigan, USA. My dissertation concentrated on static program analysis of Java program code, with a particular focus on security vulnerabilities in mobile applications, especially those running on the Android platform.

Research Background and Contributions

Static program analysis is a powerful tool in cybersecurity. It enables the automatic detection of vulnerabilities within software code. Unlike dynamic analysis, static analysis does not require execution. This approach employs formal methods and mathematical models to identify potential flaws. It seeks correctness, which makes it invaluable in the ongoing effort to protect sensitive data, networks, and systems from cyber threats. My work has primarily focused on developing new, theoretically sound software analysis techniques, as well as enhancing the accuracy and performance of existing techniques. The ultimate goal is to improve the automated discovery of critical vulnerabilities. Automation, crucial for developing secure software, is essential in any software development methodology, especially in continuous integration and continuous delivery, where it ensures the security and reliability of software.

During my doctoral studies, I focused on static analysis techniques for Java programs, particularly applying these techniques to enhance the security of mobile applications. My work primarily focused on string analysis, numerical analysis, taint analysis, and command injection analysis. Taint analysis is used to trace the flow of sensitive information through a program, identifying paths where data might be exposed through public sinks. This method is crucial in preventing data breaches and ensuring that sensitive information is not inadvertently leaked. On the other hand, command injection analysis investigates how unsanitized input might be exploited by malicious actors, potentially leading to the execution of unauthorized commands with the same privileges as the host application. Value sensitivity was used to improve the accuracy of both analyses, reducing false positives and the need for manual intervention.

Research in static program analysis is highly theoretical, requiring a deep understanding of formal methods and their application to real-world problems. However, I have always prioritized the practical implications of my work, striving to bridge the gap between theory and application. My work primarily focuses on the practical application of theoretical research, with emphasis on securing mobile technologies. As mobile technologies have become integral to modern life, ensuring their security is critically important.

Current and Future Research Directions

Since completing my PhD, my research has expanded to explore the integration of static program analysis within the broader context of software development methodologies, particularly DevOps and CI/CD. DevOps has become a critical methodology in modern software engineering, emphasizing automation to enhance the reliability and efficiency of software release cycles. My recent work has focused on investigating how static program analysis can be leveraged to ensure the security, verification, and assurance of code within DevOps pipelines. By automating the detection of vulnerabilities and verifying the correctness of code before deployment, static analysis can reduce the need for manual code reviews, thereby optimizing the software development process.

In addition to my work on static analysis in mobile applications, I have also investigated its application in distributed web programs, which share similar challenges related to lifecycle and control flow as those encountered in Android development. My goal is to develop tools that can automatically analyze and verify distributed systems, ensuring they meet security and performance requirements without the need for extensive manual intervention.

Looking ahead, I plan to further explore the role of static program analysis in emerging software engineering practices. This includes investigating how these techniques can be adapted to new paradigms such as microservices, serverless computing, and other distributed architectures that are becoming increasingly prevalent in industry. My goal is to develop innovative solutions that integrate static analysis seamlessly into the software development lifecycle, ensuring that security and reliability are maintained even as the complexity of systems continues to grow.

Impact and Vision

The impact of my research extends beyond the academic community, contributing directly to the development of safer and more secure software systems. By improving the tools and methods used to detect vulnerabilities, my work helps ensure that the software upon which society heavily relies is both reliable and secure.

Moreover, I am committed to continuing my contributions to scholarly communication through publications in high-quality, peer-reviewed conferences and journals. I believe that sharing knowledge and collaborating with others in the field is essential to advancing the state of the art in cybersecurity.

At the core of my research is a dedication to addressing real-world challenges. As I look to the future, I am excited to continue pushing the boundaries of what is possible in static program analysis, with the ultimate goal of creating a safer digital environment for all.

Diversity and Inclusion Statement
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As an educator with a diverse academic and cultural background, I am deeply committed to fostering an inclusive learning environment where all students feel valued, respected, and empowered to succeed. My experiences, ranging from earning a Teaching Diploma in Science from the Lebanese University to obtaining a Professional Master of Science in Computer Science from Maharishi University of Management, completing a Ph.D. in Computer Science at Oakland University, and gaining extensive industry experience, have profoundly shaped my understanding of the vital role diversity plays in education. I believe that the richness of diverse perspectives is essential to innovation and growth in the field of computer science.

My teaching philosophy is rooted in the belief that education should be accessible to all students, regardless of their background or circumstances. I strive to create a classroom environment that bridges the gap between theoretical knowledge and practical application, ensuring that every student can relate abstract concepts to real-world experiences that resonate with their unique perspectives. By using practical examples and culturally relevant content, I make complex ideas accessible to students from all walks of life.

In my role as an Assistant Professor at Maharishi International University, I have consistently worked to promote inclusivity in my teaching practices. I emphasize active learning, hands-on projects, and collaborative activities that encourage students to learn from each other's diverse experiences. My commitment to diversity extends beyond the classroom, as I am dedicated to mentoring and advising students, particularly those from underrepresented groups in computer science. I guide them through their academic and professional journeys, helping them navigate challenges, identify their strengths, and achieve their goals.

Maharishi International University's Consciousness-Based Education (CBE) has also played a significant role in shaping my approach to diversity and inclusion. The incorporation of Transcendental Meditation (TM) into the curriculum fosters a positive and supportive learning environment that enhances focus, reduces stress, and promotes a sense of belonging. These principles align closely with my commitment to creating an inclusive classroom where all students can thrive. By integrating CBE into my teaching, I

help students not only master technical skills but also develop the soft skills necessary for success in a diverse and global workforce.

I am also actively involved in curriculum development, ensuring that the courses I teach are inclusive and reflect the latest industry trends and technologies. I believe that staying current with technological advancements is crucial to providing all students with the tools they need to succeed in the rapidly evolving tech industry. By continuously updating the curriculum to include diverse perspectives and emerging technologies, I aim to equip my students with a cutting-edge education that prepares them for the challenges of the future.

In conclusion, my vision as an educator is to empower all students to become knowledgeable, innovative, and ethical professionals who contribute meaningfully to the field of computer science. I am passionate about nurturing the next generation of computer scientists who are not only technically proficient but also attuned to the ethical and societal implications of their work. I am committed to making a lasting impact on my students by fostering an inclusive environment that celebrates diversity and prepares them to succeed in a global and interconnected world.