RAMYA MANIKYAM

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EDUCATION

Expected 2019	University of South Alabama	Mobile, AL, USA

Ph.D. in Computing

- o **Advisor:** Prof. Dr. J. Todd McDonald
- o **Area of Interest:** Software Security, MATE Attacks, Reverse Engineering, Obfuscation, White Box Cryptography, Homomorphic Encryption, Component Encryption.

2016	University of South Alabama	Mobile, AL, USA

Master of Science: Computer and Information Systems

- o **GPA:** 3.9
- o **Master's Thesis:** "Comparing the Effectiveness of Commercial Obfuscators against Man-at-the-End Attacks"
- o **Advisor:** Prof. Dr. J. Todd McDonald
- o **Coursework:** Information Assurance, Database Management, Advanced .NET C#, System Analysis and Design, Mobile App Development, App Design-Implementation. Project-Change Management, Website Management

2014	Jawaharlal Nehru Technological University	Hyderabad, India

Bachelor of Science: Computer Science Engineering

- o **GPA:** 3.8
- o **Coursework**: Data Communications and Computer Networks, Web Services, Linux Programming, Design Patterns, Software Testing Methodologies, Object Oriented Analysis and Design, Network security, Compiler Design, Web Technologies, Computer Forensics, operating Systems, Software Engineering, Computer Organization, Database Management Systems, Object Oriented Programming-JAVA, Design and Analysis of Algorithms.

PUBLICATIONS

- o Manikyam, R., McDonald, J. T., Mahoney, W. R., Andel, T. R., & Russ, S. H. (2016, December). Comparing the effectiveness of commercial obfuscators against MATE attacks. In Proceedings of the 6th Workshop on Software Security, Protection, and Reverse Engineering (p. 8). ACM.
- o McDonald, J. T., Manikyam, R., Glisson, W. B., Andel, T. R., & Gu, Y. X. (2017, August). Enhanced Operating System Protection to Support Digital Forensic Investigations. In *Trustcom/BigDataSE/ICESS, 2017 IEEE* (pp. 650-659). IEEE.

SKILLS & ABILITIES

- o Languages: C, C++, C#. NET, ASP.NET, JAVA, Ruby, JavaScript, HTML, SQL, MS Access
- o Others: Unix/Linux, Rails, Hadoop, AWS, Docker, Spark

EXPERIENCE

06/2016 – Current	University of South Alabama	Mobile, AL

Graduate Research Assistant

- o Working on implementing a general program protection using white-box cryptography and component encryption

01/2016 – 08/2016	Charmed PromotionsMobile, AL

Software Developer (Internship)

- o Migration of website from classic ASP to ASP.NET

- o Coding changes (HTML, ASPX, Code behind, Client-Side Script, C# Class Libraries, Windows Service, Web Services etc.) and ensure a successful build.
- o Plan and Identify the core stack order for deployment and prioritize completion of product in correct order.

01/2015 –05/2016   University of South Alabama   Mobile, AL
Graduate Research Assistant

- o Assisted in the presentation of lab demonstrations during the field trip activities that are computing-based learning activities connected to STEM curriculum.
- o The topics included forensics, software protection, malware analysis, network defense, cyber warfare, and personal web security.

01/2014 –06/2014   Maisa Solutions Limited   Hyderabad, India
Software Developer (Internship)

- o Collaborated with Product Management and User Experience experts regarding product definition, schedule, scope and project-related decisions.
- o Built, tested and deployed scalable, highly available and modular consumer based application "kidslink" using Ruby on Rails.

PROJECTS

- o Security Analysis of a Single Sign-On Mechanism for Distributed Computer Networks-*March 2014*
- o Technical Seminar Evaluation Systems- *December 2013*

PRESENTATION/AWARDS

- o Attended the security conference and workshop ACSAC 2017 in Orlando, Florida.
- o Presented paper "Enhanced Operating System Protection to Support Digital Forensic Investigations" at SPREG and DFII
- o Presented paper "Comparing the Effectiveness of Commercial Obfuscators against Man-at-the-End Attacks" at SSPREW-6
- o Presented paper "Comparing the effectiveness of Commercial Obfuscators against Man-at-the-End Attacks" at SPREG and DFII
- o Presented a workshop on "Cyber Ethics and Hacking" during Cyber Awareness Month
- o Attended the Seventh International Summer School on Information Security and Protection (ISSISP)
- o Presented Master's thesis "Comparing the effectiveness of Commercial Obfuscators against Man-at-the-End Attacks" in 3MT
- o Academic Topper for four consecutive years (2010-2014)
- o Awarded second for presenting a paper on Surface Computing at AAGAMA'13 (National Level Technical Fest held at the Anurag Group of Institutions)
- o Received memento and appreciation for organizing the fest Tekzion'12 (National Level Techno-Cultural Symposium) in the state of Telangana, India