

<b>Presently</b>	<ul style="list-style-type: none"><li>• Pursuing M.S. in Computer Science and Specializing in Information Security at the George Washington Univ(Average of Sem 1, 2 &amp; 3 : 3.74)</li></ul>	
<b>Jun'03-Aug'03</b>	<b>EDS INDIA PVT. LTD.,Project Trainee</b>	Chennai,India
<b>Sep'02</b>	<ul style="list-style-type: none"><li>• Programming and project design for e-TTS and ADIR2 – admin tool in ASP</li></ul> <b>COSMOSOFT TECHNOLOGIES</b>	Chennai,India
<b>Education</b>	<b>Shanmugha Engineering College</b> <ul style="list-style-type: none"><li>• Bachelor of Engineering, Computer Science and Engineering ,May'03(Avg :76%)</li></ul>	Tanjore,India
<b>Awards</b>	<ul style="list-style-type: none"><li>• T.A. Ramachandra Iyer award for the highest number of prizes in technical Paper presentations</li><li>• The National Dean's List ® award 2003-2004 for academic achievements</li></ul>	
<b>Research</b>	<ul style="list-style-type: none"><li>• Research Assistant at Computer Science department at GWU (Webmaster) (Jan'04 – Jun'04)</li><li>• Research Associate at <b>Cyber Security Policy &amp; Research Institute(CSPRI)</b> (Info. Security) (Jun-Nov'04)</li></ul>	
<b>Publications</b>	<ul style="list-style-type: none"><li>• “ <i>Unix Security: A Boon for its survival</i> ” in DeveloperIQ, Oct2003 Vol.3 No.10pp.92-94</li><li>• “ <i>Elements of Unix Security-part 2</i> ” in DeveloperIQ, Sep2003 Vol.3 No.9 pp.93-96</li><li>• “ <i>Elements of Unix Security-part 1</i> ” in DeveloperIQ, Sep2003 Vol.3 No.9 pp.90-93</li><li>• “ <i>PGP based Encryption Implementation</i> ” in DeveloperIQ,Sep2003 Vol.3 No.9 pp.58-61</li><li>• “ <i>Psychometry Automation:A new Approach</i> ” in DeveloperIQ, Aug2003 Vol.3 No.8 pp.74-80</li><li>• “ <i>A New Approach to Cryptography</i> ” in DeveloperIQ, Jun2003,Vol.3,No.6 pp.66-69</li><li>• “ <i>Complete Automated(ComAd)car</i> ” in Electronics Today, May2003 Vol.35,No.10 pp.53-58</li><li>• “ <i>Six Phase Sensing Robot</i> ” in Electronics Today, Feb2003,Vol.35,No.7 pp.59-64</li><li>• “ <i>Intelligent Robots – An Embedded A.I. Product</i> ” in DeveloperIQ, Feb2003,Vol.3,No.2 pp. 72-77</li></ul>	
<b>Tech. Presentations</b>	<ul style="list-style-type: none"><li>• ‘ <i>Automated World</i> ’ at Karunya Institute of Tech. and Science, 2<sup>nd</sup> Prize</li><li>• ‘ <i>Automation and its Benefits</i> ’ at R.M.K. Engineering College</li><li>• ‘ <i>Mechatronics in Computers using A.I</i> ’ at.Thiagarajar College of Engineering</li><li>• ‘ <i>Complete Automated Car</i> ’ at St. Joseph’s Engineering College, 2<sup>nd</sup> Prize</li><li>• ‘ <i>Mobile robots in Distributed Envnt.</i> ’ at Pushpam Inst. Of Comp. Studies., 2<sup>nd</sup> Prize</li><li>• ‘ <i>Dr.Robot for Rural India</i> ’ at Coimbatore Institute of Technology, 1<sup>st</sup> Prize</li><li>• ‘ <i>Internet Security</i> ’ at VLB Janakiammal Engineering College</li><li>• ‘ <i>Pseudonymous SET</i> ’ at Perriar Maniammai Engineering College</li><li>• ‘ <i>SET Protocol</i> ’ at Thiruvalluvar Engineering College, 1<sup>st</sup> prize</li></ul>	
<b>Conference</b>	<ul style="list-style-type: none"><li>• Participated in WiSe'04 workshop in the MobiCom'04 conference</li><li>• Participated in Wireless LAN's Business Plan conducted by UNSTRUNG and Live!Real</li><li>• Participated in Infrastructure Strategies 2003, conducted by Computer Associates</li><li>• Participated in SUN Tech days 2003, conducted by Sun Microsystems Pvt. Ltd.</li><li>• Participated in International Workshop on Nanotechnology and Health care</li><li>• <b>Presented and published</b> “ <i>Six phase sensing robot</i> ” at International Conf. on Embedded systems</li><li>• Participated in International Conference on Knowledge Based Computer Systems</li></ul>	
<b>Technical Skills</b>	<ul style="list-style-type: none"><li>• <b>Languages</b> : C, C++, Java,VB, JSP, ASP</li><li>• <b>Operating Systems</b> : DOS, Windows NT/98/2k/Me/Xp, Solaris, Linux(RedHat, FedoraCore2)</li><li>• <b>Database</b> : Oracle, MySQL, SQL Server7.0</li></ul>	
<b>Training</b>	<ul style="list-style-type: none"><li>• <b>Java Development</b> at NIIT for Core, Advanced, &amp; Enterprise Java Bean</li><li>• <b>Sun Certified Solaris Administration</b> at Digerati for SA-118,SA-238 &amp; SA-288 (Core Skills)</li></ul>	
<b>Other Activities</b>	<ul style="list-style-type: none"><li>• 2<sup>nd</sup> prize in Web designing at SCANIT2002</li><li>• Quiz and Debugging in Netshoc'01</li><li>• Network gaming in e-LUSION'03</li><li>• Human Resource Development Program</li><li>• SET for Internet Security at the ACE</li><li>• Quiz, Debugging, and S/W contest at Adaikalamatha college</li><li>• S/W contest,Quiz,Word Hunt and Marketing Contest at ORDUSION 2003</li><li>• Dumbc &amp; Addmad at Jacofeast2k3</li><li>• 3<sup>rd</sup> prize in Computer Witz at PABCET</li><li>• 1<sup>st</sup> prize in Visual Trickery at PABCET</li><li>• 1<sup>st</sup> prize in Delegates Debate at PABCET</li><li>• 1<sup>st</sup> prize in Marketing at VIRTUA 2003</li></ul>	
<b>Projects</b>	Refer to <b>Annexure</b>	

## Annexure

- **e-EDS Burning Syndrome Testing for HR in any Organization**

**Desc** : Productivity of any organization depends on the efficiency of the employee's. The efficiency of the employees varies according to the capability and stress due to external environment. To test the weakness and faults, and to increase the capacity of the employee e-EDS was built for the HR department. It was also published as an article, "*Psychometry Automation:A new Approach* " DeveloperIQ, Aug2003 Vol.3 No.8 pp.74-80.(DeveloperIQ) **Status** : Completed

- **OnTeSys : Online Testing System for making a Paper-less University**

**Desc** : **Online Testing System(OnTeSys)** was designed for our institution as my Under Graduate project. It was built using JSP and MySQL as both were free and efficient. It was based on the Computer Adaptive Test, which means that the difficulty level increases according to the previously answered question. The purpose of the software was to convert the Tests into Computer Adaptive.(Coursework : Undergrad Project) **Status** : Completed

- **Substitution Permutation Networks(SPN)**

**Desc** : Cryptanalysis of SPN's using C++. Breaking the skeletal structure of the AES and DES. The project is based on the research work "A tutorial on Linear and Differential Cryptanalysis By Howard M.Heys" The project will also be released in Source Forge under the licensing of BSD,MIT and GNU in the name "CSPN". The updations of every state are still continuing and the statistical analysis of the attack is also recorded. (Coursework CSci 284: Cryptography, SourceForge: Still Updating) **Status**: Completed

- **Mobile Agent Security using Port Scan**

**Desc** : Implementing vulnerability Port scanner to mobile agents platform. The mobile agents are vulnerable if an intruder sends a replicated agent into the network to make it advantageous to hack into the node. To avoid that, we have to maintain a port manager that manages the open ports and closing the unused and vulnerable ports.(Coursework CSci 383: Computer Security – II, CSPRI)**Status** : Completed

- **Information Warfare – The art of Ethical Hacking in Practical world**

**Desc** : The project was based on "Reconnaissance – Powerful enough to take over the world". Our task was to collect information about any given target from the Internet. Our restrictions and boundaries were : No Social Engineering, No direct or Indirect relationship with country members through communication & No superficial stories. Our mission was to find the weakness of the target and the maximum possible data that were available open at every corner of the internet about our target through reconnaissance, and finally explain its Critical infrastructure's weakness and corrections that are needed.(Coursework CSci 384: Information Warfare) **Status** : Completed

- **Secured Network Administration Operating System (SNA OS)**

**Desc** : SourceForge project implementing agent based operating system. It is still in its design phase. The project members are around the world and they have prior experience of making open source projects. The plan is to create a completely new method for agents called the Split kernel that interfaces with the Agent Station in a more secured way to protect in open networks even if some intruder enters into the network. (SourceForge : Design Phase) **Status** : Designing

- **Templario(Mobile Agent Platform)**

**Desc :** This is an opensource project that is done by few students from Korea and Mexico. I am one of the administrators of the project at the Sourceforge Opensource. My task in this project is to create a security framework architecture in such a way that the host weakness and the agent weakness are sent using zero knowledge technique. It is a strange combination of e-commerce jargons with the security framework for mobile agents.(SourceForge) **Status:** Designing

- **Attacks on WSN and preventive measures**

**Desc :** This project deals with the various attacks commonly found on the Wireless Sensor Networks (WSN) as well as the uncommon ones, which are not found in the real world, and we gave the counter measures to those attacks. We also did an analysis and design of the future possible attacks due to the combination of the existing ones and how they could affect the sensor networks. We studied the weakness of the existing protocol and gave prevention methods by filling up those loopholes. (Csci 388: Wireless Security Project) **Status:** Complete

- **Crypto Service Provider # 11**

**Desc :** This project involves with the creation of Crypto Service Provider(CSP's) for the browser's such as the Internet explorer and the netscape. We mainly concentrate on two different kinds of security standards. One is the Microsoft's CryptoAPI and the other is the commonly used PKCS#11( as it uses private key). This project is made in such a way that we integrate the CAPI and PKCS#11 using our CSP. We create certificates on both the databases and hence it is used for a good interaction among the various browsers. My task in this project is to implement the encryption and decryption functions, check for hashing and key verification. This is an open source project at Libre Labs. **Status :** Partly Complete(released)

- **Sojourner Linux**

**Desc:** We are a team of members from the open-source community. We have joined to form a version of linux, which would be a stripped version of Fedora intems of the easier usage. Most of the operating systems that are really good in security and other features, uses a "geeky" interface. Which means that, only programmer's and OS geeks or developers can make use of them. We would like to bring the same operating system, by providing a solid GUI based interface, with additional security features. The OS will be in a GPL license. I shall be managing the security part and it is yet to be registered for license. We have planned to make use of BSD, as we need not reveal the code for the security part, and we are planning to make the code in such a way that reverse engineering of the code is almost impossible. **Status:** Planning, Alpha(Sourceforge)

- **Property Inspection Software**

**Desc:** This project basically assists property inspectors (especially for real estate) to manage their businesses, gather and store information about inspections, record the conditions of property, and produce automated, high quality inspection reports. (Sourceforge) **Status:**Planning

- **Research Assistantships**

**“Research Assistant @Computer Science department, GWU (Webmaster, Jan’04 – Jun’04)”**

Designed and Developed STEM(Science Technology Engineering and Mathematics) website for the National Science Foundation(NSF) under the guidance of Prof.Dr.Dianne Martin(Chair Of Computer Science), and helped in the development of websites for CSPRI and AOL home of the 21<sup>st</sup> century.

**“Research Associate at Cyber Security Policy & Research Institute(CSPRI) (Info. Security)”**

Was involved in the following projects:

- **Security Framework**  
This project deals with providing certificates and signing and encryption of all the data that are needed to be secured. There was a package constructed by a previous student similar and more powerful than the Open SSL. There were 2 other thesis Student from the Stockholm University(KTH,Sweden) creating extensions for Mozilla and Open Office. My job was to integrate them into the security framework and verify its stability.
- **CSP-11**  
This project is the making of a new Crypto Service provider(CSP) for integrating the various browser certification services. Here we tried uniting the Crypto API(CAPI) from the Microsoft with the PKCS-11(Netscape and Mozilla) at run time. That is we tried interchanging certificates from one browser to the other Cert DB.
- **SCCSP**  
This project involves with the creation of Crypto Service provider(CSP) for the smart card interface. This deals not only with the browser interface but also the various smart card extensions. My duty was to create CSP’s for the smart cards using the standards such as the BSI. We used Schlumberger cards, for which I tried making CSP for applet interface.

- **Freelancing Projects**

- Introduction to Security Certification ---- LearnSecurityOnline Inc.
- Snort and TCPDump questions ---- LearnSecurityOnline Inc.
- Security Policies for LSO Inc. ---- LearnSecurityOnline Inc.