

Statement of Purpose – Computer Science & Information Systems (MS)

Having worked in the IT field for over 20 years, I have a broad background and skillset which I can bring to bear in pursuit of a graduate degree in Computer Science. A graduate degree will help me distinguish myself from others in my field and is something I personally have wanted to obtain. My BS from UM-Flint is something I have always been proud of; therefore, UM-Flint is naturally my first choice to study for a graduate degree.

I received my Bachelor of Science majoring in Computer Science from UM-Flint in August, 1994. This was a seven-year journey in which my overall GPA was not stellar. I attribute this to immaturity and lack of commitment during that stage of my life. Something worth noting which is not reflected on my transcript is that I participated in the 1991 ACM Programming Challenge in Lexington, Kentucky. Dr. Rajagopal Shantaram (who at the time was my professor for a C++ language lab) led the event for UM-Flint and offered me the opportunity to attend. As a group, I believe we only placed 1 solution of 6 problems posed, however, it was a great experience to be part of.

I started my career as a contract programmer for EDS (Electronic Data Systems) in February 1995 at the GLTC (Great Lakes Technology Centre) in Flint. I was responsible for enhancements to a MicroVAX 3300 system using VAX C, Datatrieve, DCL, and FMS. The Security/CarTrack system, as it was known, ran 2 distinct applications, both using real-time and batch interfaces. The Security system was used by security guards at entrances to track residents, guests, and property moving between campus locations. The CarTrack system tracked engineering fleet vehicles and drivers throughout the campus and select off-site locations. Vehicles and drivers had RF badges which were presented to RF readers and relayed data back to the MicroVAX. My initial contracting position was for an enhancement to the CarTrack system involving the introduction of new status codes, addition of physical transponders (they had to be manually loaded into the reader hardware), and the code, screen layout, and database changes to accommodate the enhancement. During this time, I also updated a mainframe based COBOL system which processed phone billing data.

June of 1995 I hired on with EDS and have essentially held the same job since; the employers have changed over the years (EDS, HP, and GM). I became primary support for the Security/CarTrack system along with other client / server business and engineering systems. Most of these systems were Visual Basic / VBA with Oracle DB back ends. After EDS became a public company in 1996, our account was able to pursue non-GM based work. One initiative – eROM (Electronic Revenue and Outlook Management) was initially developed for the State of Michigan and later became interfaced with EDS's corporate sales application.

eROM was our team's first venture into a fully web based application. It was developed on NT 4.0 ASP (VB4 Web Classes). I was the system administrator of the NT server and domain, as I was pursuing my MCSE on NT 4 at the time. I became the technical lead and DBA for eROM to assist in debugging and optimizing code to address some stability issues. I also lead the effort to port from Oracle to SQL Server when the application was adopted at the corporate level and switched ownership from our local team in Flint.

I completed the EDS SED (Systems Engineer Development) "project-only" program in 1997, which was a 3-week project in Plano, TX. The project was a computer based library system. We employed recorded video interaction at kiosk terminals, photo library cards printed while you wait and other "self-service" features, along with automated tracking and reporting on book statuses.

In 2002 I took an assignment for the DOW account which EDS had been awarded a contract to upgrade almost all aspects of DOW's infrastructure and desktop environments. I was part of the DNCC (DowNet Command Center) and build team responsible for building out different types of servers – File/Print, OS hardening / Role Based Security, QIP, Cisco Call Managers, SQL Server, SAN based MS Exchange, and MS domain controllers. I was placed into the HPT (High Performance Team) which handled the complex EWOs for server builds and worked with remote sites during migration activities. I also developed an MS Access & Excel system to import data from Clarify (DOW's CRM tool) and provide status reports about where servers were within the build and deployment process. I completed my MCSA on Windows 2003 in 2004.

After my assignment on the DOW account, I transferred to an operations group responsible for GM's Product Development IAM (Identity & Access Management) infrastructure. This was primarily a UNIX environment utilizing LDAP and IBM TAM (Tivoli Access Manager) and TAM WebSeals (reverse web proxies). In 2006, EDS formed a global IAM group for GM which encompassed not only their Product Development space, but all process areas including employees, dealers, suppliers and Joint Venture users. Our team became the operations team for all IAM related components. I was given the opportunity to lead the work in converting the supplier portal and IAM environment from an IBM TAM based stack to a SunOne (now Oracle) OSSO based infrastructure. In 2008 GM adopted IBM TAM eSSO (Enterprise Single Sign-On) product, which I stood up and became primary support for. TAM eSSO consists of a client (AccessAgent) residing on desktops and server (IMS) components. Access profiles reside in IMS and define rules/signatures for applications which require SSO, they are essentially state engines which utilize "triggers" to trap events and "actions" to perform a corresponding task. IMS runs on WAS (WebSphere Application Server) for Windows.

In 2010 I moved from operations to the engineering side of IAM, where I developed the Access Profiles used by TAM eSSO. Additionally, I coded enhancements to various WLS Java based applications including web services, GUI end user web applications, and Oracle database changes.

In 2013 I transferred to GM from HP (HP bought EDS in 2008) when GM re-insourced their IT services from external suppliers. My initial responsibilities centered on migrating systems from supplier data centers to GM's data centers. I architected the upgrade and move of the eSSO IMS clusters. Upon completion, I moved back to operations where I am still the SME for TAM eSSO, along as primary support for other IAM systems. Operations is not only responsible for "keeping the lights on" but we also handle the change and incident management for the IAM space. Operations has been satisfying in that we get exposed to all the technologies in play at GM including, but not limited to, LDAP directories, SAML, ADFS, Web Proxies / WebGate, Siemens MetaX, Oracle databases, WLS, Linux, and 2FA / mobile access technologies. In 2014, I was awarded the "GM IT Rock Star" award (I don't particularly like the name) for work I did in automating user off-boards between two diverse systems using PL/SQL as part of a ticket reduction initiative. This award was only given to 3 people within GM IT.

It is difficult to summarize 20 years of experience in a letter without it reading like a resume. I hope I have demonstrated that I have the skills and experience required to be a great addition to UM-Flint's graduate program in Computer Science. I truly enjoy problem solving and look forward to the challenges ahead. Thank you very much for your time and consideration.

Sincerely, John Orin