**OBJECTIVE:**

Seeking position in information technology, software engineering, GIS development, or web development that will utilize and further enhance my software and web development skills

**EDUCATION:**

Virginia Polytechnic Institute & State University (Virginia Tech), Blacksburg, VA

B.S., Mathematics, May 2003

Tide Water Community College of Virginia Beach, May 1999

A.S., Computer Science

**SECURITY CLEARANCE:** TS/SCI with DHS Suitability (Active)

**SKILLS:**

Operating Systems:UNIX (Solaris), LINUX (Red Hat), Microsoft Windows, VMware Workstation, Virtual PC, Mac OS

* Programming Languages:VB.NET, JavaScript, C++, Java, C#, ASP, ASP.NET, VBA, Python (ArcPy), SQL, HTML, PHP, Ruby, Ruby on Rails,
* Development/Environment: Web-AppBuilder 2.0 for ArcGIS Portal, Web-App for ArcGIS Map, ArcGIS Web-Services, ArcGIS Desktop Development, ArcGIS 9.3/10.0/10.3.1, SQL Server 2010 Enterprise, Oracle 11g
* Microsoft Products: Microsoft Access, Microsoft PowerPoint, Microsoft Visual Studio 2008/2010/2013
* Technologies: Node Pack Manager (NPM), AngularJS, Node.js, Rails, Express, JSON Web Token

**TRAINING:**

* Web Development Immersive training (General Assembly School):
  + Web front-end development: learned and handed on building game, web-app, using HTML5, CSS, JQuery, Angular, AJAX, AngularJS, EJS Template, and Session/cookies for user security
  + Web back-end development: learned and handed on building web-server using Express, Node.js, Rails to build routes, and JSON Web Token (JWT) for web-app API security
  + Server database: learned and handed on Mongoose, MongoDB, Mongoose Schema, and PostgreSQL
* Arcpy-Development: Providing a useful and productive way to perform geographic data analysis, data conversion, data management, and map automation with Python
* Arc-Object Programming with VB.NET: Developing custom-made applications in ArcGIS using the Visual Basic .NET (VB .NET) programming language and ArcObjects
* Microsoft Training: Microsoft Certified Professional (MCP)

**WORK EXPERIENCE:**

Booz Allen Hamilton:

May 2008– Present: Senior Consultant

ArcGIS Software Developer primarily supporting the Naval Surface Warfare Center’s Cyber Warfare Engineering Division (CWED) and the Department of Homeland Security’s National Coordinating Center for Communications (NCC)

ArcGIS Desktop Development:

* Developed the Infrastructure Damage Assessment/Communication Assessment (IDA/CAM) tool. The tool provides the capability to examine the structure of relationship between network entities
* Designed and developed network dependency analysis and assessment for the NPA-NXX Look-up feature of the Infrastructure Mapping Tool (IMT)
* Designed and developed the LEC Query tool which allows users to query and display a subset of the Local Exchange Routing Guide (LERG) data in ArcMap
* Developed the IMT Wireless Query Tool that provides user the criteria to query the set of wireless technologies available in database
* Developed the IMTSea, Lake, and Overland Surge from Hurricanes (SLOSH) tool which translates the standard NOAA SLOSH model input to Geospatial format that can be displayed throughout any of the NOAA SLOSH model regions or basins
* Developed the IMT Web Resource Tool. An internet-based tool that pulls information from web services to display in ArcMap
* Developed the IMT STP Query Tool. The tool provides capabilities to pair the Signal Transfer Points for network analysis
* Developed the IMT Layer Query Tool. The tool provides the analyst capabilities to perform map layer assessments with spatial query options
* Provided onsite support and monthly updates for the IMT and supporting database at the NCC and Federal Emergency Management Agency (FEMA)
* Geocoded the Common Language Location Identifier (CLLI), and LERG data
* Developed the Undersea Cable Infrastructure (UCI) Query Tool to support undersea cable network analysis based on the selections of landing station, cable system, region, choke point, and/or visible extent criteria
* Developed The UCI Outage Impact tool to support undersea cable impact assessment/analysis
* Developed the UCI Routing Tool to support finding undersea cable paths and routes from selected starting and ending landing stations, and number of selected cable systems

ArcGIS Web App Development with JavaScript API (WebIMT 1.0):

* Developed the UCI Capacity Tool which supported undersea cables analysis
* Developed the UCI Historical Outage Tool which supported undersea cable historical outage analysis
* Developed the Live Web Feeds Tool that supported live weather data analysis
* Developed the Web Resources Tool that provided available web-resources
* Developed the KML Tool to display user-selected KML data on the WebIMT map

ArcGIS Portal Development with Web AppBuilder 2.0 (WebIMT 2.0):

* Developed The UCI Capacity Tool which supported undersea cables analysis
* Developed the UCI Historical Outage Tool which supported undersea cable historical outage analysis
* Developed the Live Web Feeds Tool that supported live weather data analysis
* Developed the Web Resources Tool that provided available web-resources
* Developed the KML Tool to display user-selected KML to display on map

ArcGIS Web Services development with ArcPy (Python):

* Developed/created web services that supported building map, layers and queries for WebIMT 1.0 and WebIMT 2.0
* Developed/created web services that supported the geospatial queries for UCI Historical Outage, UCI Capacity, Live Feeds, and Web Resource Tools
  + Developed/built geoprocessing tools that supported ArcGIS web services for WebIMT 1.0 and WebIMT 2.0

January 2006 – May 2008: Consultant

Telecommunications Analyst and Software Developer

* Developed the Geospatial Open Source Data Environment (GEODE), a new geospatial mapping tool designed to market infrastructure analysis capabilities to potential new clients utilizing open-source and commercial data sets
* Designed and developed the National Communication System (NCS) Meta Data Website, providing user and resource strategy/information assessment
  + Provided research and analysis for the Supervisory Control and Data Acquisition System (SCADA) Analysis project

**LANGUAGES**: Fluent in Vietnamese

**REFERENCES**: Available Upon Request