**Randy Howard Smith, Jr.**

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**Personal Statement**

I am a Geographic Information Systems (GIS) Specialist at Hood College. My goal is to progress my career as a professional within a geospatial environment, including GIS education, facilities management, environmental and demographic spatial analysis. I am also interested in pursuing my own research interests, which include the GIS analysis of predictive policing strategies and the digital mapping and preservation of historic sites.

**Education**

**MSc with Merit, Geospatial and Mapping Science** December 2013

University of Glasgow, Glasgow, UK

Master’s Thesis: The applications of terrestrial laser scanning and open source software in digital conservation

**BA, Environmental Science** May 2010

Hood College, Frederick, MD

**Employment History**

**Geographic Information Systems (GIS) Specialist** August 2015 – Present

Hood College, Frederick, MD

Taught ENSP 103 Introduction to GIS; Guest Lectured for courses including CS 544 Knowledge Representation & Reasoning, FYS 101 First-Year Seminar, and HIST 366 Ancient Rome; Developed and instructed workshops for Faculty and Students, including an Introduction to GIS, Visualizing Data, and Remote Sensing and Image Classification; Developed Campus and Utilities GIS; Committee member for the Market Research and Admissions Group; Collaborated with Faculty and Administration to develop and enhance research through the use of GIS; Provided geospatial and cartographic support for ongoing GIS projects, including bathymetric surveying, remote sensing, and habitat and stream health; Provided support and instruction for field data collection, preparation, and management for various departments.

**Geospatial Technical Writer** February 2014-November 2014

Synthegis, Inc. Mclean, VA

Oversaw and developed geospatial focused Federal grant proposals; Established, gathered, analyzed, and composed research objectives, methodology, and technical information; Translated technical information into clear, readable documents to be used by technical and nontechnical personnel; Provided geospatial and cartographic support for ongoing GIS projects.

**Event Coordinator** October 2013 - Present

RaceDC Timing, Falls Church, VA

Managed online registration setup and distribution of race-day material to participants for regional and national events; Supervised racecourse management, including the timely and accurate setup of race-day structures and timing devices, volunteer coordination, and onsite operation of computer race timing; Assessed the accuracy of database mergers to ensure participants were given their race times after crossing the finish line.

**Manager, Inventory** August 2010-August 2012

iCore Networks, Inc., McLean, VA

Managed contract and purchasing negotiations of inventory from multiple vendors; Responsible for project management of customer installation equipment, including logistics of deployment in regard to scheduled timelines and quality standards; Developed inventory control, quality assurance, and standard operating procedures.

**Projects**

**Hood College Utilities GIS** January 2016 – Present

Hood College, Frederick, MD

Project includes: Creation of utilities GIS, georeferencing and digitization of existing paper records, unknown utility tracing and GNSS recording, and web portal creation for facilities interface.

**Potomac River Algal Bloom Monitoring** May 2016 – Present

Hood College, Frederick, MD

Project includes: Identification of Algal Blooms, remote sensing detection of various algal species, and land use and land cover classification.

**Marketing and Admissions Research** December 2015 – Present

Hood College, Frederick, MD

Project includes: Identification of undergraduate and graduate high yield geographic areas, market segmentations of target audiences, spatial statistical analysis to identify driving enrollment factors, and identification of potential high yield geographic areas.

**Lake Linganore Quality Monitoring** December 2015 – Present

Hood College, Frederick, MD

Project includes: Water quality analysis and surface interpolation and watershed delineation.

**Fishing Creek Reservoir Bathymetry** August 2015 – February 2016

Hood College, Frederick, MD

Project included: Hydrographic survey of fishing creek reservoir using Autonomous Surface Vehicle (ASV), bathymetric surface creation, sedimentation analysis, and dredging analysis and water capacity recovery exploration.

**Hopetoun House Terrestrial Laser Scan and Digitization** June 2013-August 2013

University of Glasgow, Glasgow, United Kingdom

Project included: Comprehensive terrestrial laser scans of the Bruce Gates, georeferencing, digitization of structures, and geo-registration, three-dimensional model creation and topographic mapping, and data submission to Historic Scotland for digital cataloguing.

**Coastal Landscape Change Monitoring**  January 2013-April 2013

University of Glasgow, Glasgow, United Kingdom

Project included: Assessed change in landscape to the area of interest over a small area south of Dornoch, Scotland, analyzed of historical and current high-water line movement and edge of vegetation, calculated areas of sediment gain and loss, beach height, and volume change, and creation of digital terrain models

**Related Skills**

• GIS and surveying software: ArcGIS 10.4, CartoDB, QGIS, AutoCAD, PDS2000, N4ce, Star\*Net, Leica GeoOffice, Leica Cyclone, CloudCompare, SocetSet, ERDAS Imagine, Google Earth, OpenStreetMap, TerraSync, GPS Pathfinder Office.

• Hydrographic and land survey principles and practice, including experience with Leica Geosystems and Trimble surveying equipment including total stations, GNSS, and terrestrial laser scanners.

• Risk terrain modeling, geospatial data conversion, geospatial data input and editing, digitization, geo-referencing, geostatistical and spatial analysis, GPS processing.

• Scientific research methods, quantitative analysis, and comprehensive scholarly writing for federal grant proposals.

• Other Software: Microsoft Office Suite, Brackets, Microsoft Dynamics GP, Salesforce, Photoshop CS, WordPress.

• Programing Languages: HTML, Python, Java.

**Honors and Awards**

• University of Glasgow, MSc Merit Award, 2013

• University of Glasgow Country Scholarship, 2012

• iCore Networks, Employee of the Month, December 2011

• Hood College Academic Scholarship, 2008-2010

• Monroe Community College Academic Scholarship, 2006-2008

**Additional Interests**

• Member of the AGI (Association of Geographic Information)

• Competitive Runner: Member of the Garscube Harriers and Montgomery County Road Runners Club