Ankan Basu
Software Engineer - MID

Christiansburg, VA - Email me on Indeed: \underline{\text{indeed.com/r/Ankan-Basu/261126329d10b113}}

Mr. Basu is a Mid-Level Software Engineer at Harmonia Holdings, Inc, at Blacksburg, VA. He has over 10 years of experience in data analysis and data visualization using R, Python and Fortran. For the last two years, he has been working on US Navy projects developing secure enterprise level software solution using Java and Ruby. Apart from practicing secure coding, Mr. Basu regularly performs vulnerability assessment, penetration testing, application STIGging using various tools such as ZAP vulnerability assessment tool and Kali Linux. Additionally, he manages a research private cloud for US to test software stack based on Tactical Cloud Reference Implementation (TCRI). Mr. Basu is CompTIA Security+ certified and very active in CTF events. He has received NSA funded award for securing top position(7th) in a Cyber Security Contest at Radford University in 2016.
Willing to relocate: Anywhere
Authorized to work in the US for any employer

WORK EXPERIENCE

Software Engineer
Harmonia - Blacksburg, VA - November 2015 to Present

As a Mid-level software Engineer, Mr. Basu has worked on multiple Government projects, especially for the US Navy. A significant amount of work involves developing a web installer for Navy's Tactical Cloud Reference Implementation (TCRI) following secure coding practice and STIG guidelines. Additionally, Basu also manages private cloud at Blacksburg office for hosting Navy's core application.
• Scrum Master, uses Agile software development principles for projects.
• Develop Enterprise Ruby and Java applications in MVC architecture.
• Manage a private-cloud with an ESXi hypervisor and perform testing of cloud based distributed software stack.
• Manage and configure clusters within private cloud using Puppet and Ansible, perform duties of a system administrator.
• Perform penetration testing (ZAP tool) and prepare vulnerability reports for software products to meet STIG requirements.
• Prepare Security Assessment Reports (SAR) based on NIST 800-53 control framework.
• Prepare POA&M documents, Security Assessment Reports (SAR) and vulnerability reports.
• Develop datastore using relational database systems and concepts (SQL Server, MySQL, PostgreSQL, etc.)
• Experience with TCP/IP networking (e.g. subnetting, routing, vlans, etc.), network services/protocols (e.g. smtp, ntp, ssh, sftp, http, etc.)
• Experience with Security and Hacking Tools such as NMAP, Metasploit, Burp Suite, Kali Linux
• Experience with Relational database management systems (RDMS) and Structured Query Language (SQL)
• Experience with web-based attacks and vulnerabilities such as code injection, CSRF, and SQL Injection
• Experience with analyzing and interpreting PCAP data

Senior Hydrogeologist / GIS analyst
Cardno Inc - Bluefield, VA - June 2012 to November 2015

• Managed complex large-scale projects for various clients.
• Prepared numerical groundwater models using FORTRAN based MODFLOW.
• Prepared analytical groundwater models based on ANAQSIM.

- Developed secure computer code using R to analyze radioactive sensor data.
- Developed in-house software plugins for hydrogeologic data analysis.
- Developed python scripts to automate GIS data processing and model development.
- Prepared geochemical models using PHREQC and Geochemist's Workbench.
- Prepared procedure for VA Department of Transportation (VDOT) for handling acid producing soils.
- Prepared safety procedures and policies for various field projects.
- Audited numerical models prepared by other consultants.

GIS Analyst
Hydrogeologist - June 2006 to June 2012

Research Assistant/Teaching Assistant
Marshall Miller and Associates   -   Bluefield, VA - June 2004 to June 2006

Bluefield, VA
- Managed complex geologic, geophysical and hydrogeologic projects
- Performed statistical data analysis and data visualization.
- Prepared reports and develop computer models for geochemical analysis such Eh-pH diagrams and mixing models.
Research Assistant/Teaching Assistant, 06/2004-06/2006
Virginia Tech, Blacksburg, VA
- Taught graduate level lab classes in Hydrogeology.
- Developed FORTRAN code for 3D-groundwater problems.
- Performed data analysis and data visualization of geochemical data.
- Used Atomic-Adsorption Spectrometer and Scanning Electron Microscope for chemical data analysis.

Research Assistant/Teaching Assistant
Georgia State University   -   Atlanta, GA - June 2002 to June 2004

- Taught geology lab classes, Managed X-Ray diffraction lab
- Performed K-Ar radiometric dating of soil samples.
- Performed statistical data analysis of geochemical data.

EDUCATION

A.S. in Cyber Security
New River Community College
2017

A.S. in Networking
New River Community College
2017

A.S. in Information Technology
New River Community College
2017

M.S. in Geology
Georgia State University
2004

M.S. in Applied Geology
IIT

2002

B.S. in Earth Sciences
Jadavpur University
2000

SKILLS

data analysis. (7 years), data visualization. (2 years), MARKETING ANALYSIS (7 years), networking (1 year), visualization. (2 years)

CERTIFICATIONS/LICENSES

CISSP

ADDITIONAL INFORMATION

Highlighted Skills
• Project Management
• 2 years of experience managing a private cloud for US Navy with a ESXi hypervisor
• Experience in network monitoring with Nagios/Icinga, traffic analysis using Wireshark and system log analysis.
• 10 years of data analysis, data visualization, numerical modeling and scripting experience using Excel, R and Python.
• Hands on experience with TCP/IP networking
• Cyber Security: Pen Testing, vulnerability assessment using ZAP, familiarity with Kali Linux tools, Wireshark network analysis.
• Technologies: JAVA EE, Ruby, R, PHP, Python, JavaScript, Docker, Jenkins, RHEL, VMware vSphere, bash scripting, SQL, puppet, Ansible