

NEIL M. DWIVEDI

6012 Carrington Green Pl, Glen Allen, VA 23060 • 804-363-3455 • meesch4@gmail.com

Skills

Programming Languages: Python, Java, NodeJS, AngularJS, HTML, CSS, XML, JavaScript, PostgreSQL, MongoDB, Spring Batch

Tools: Agile, AWS, UI Design, UNIX, pgAdmin, DBeaver, Git, Microsoft Office Suite

Experience

The MITRE Corporation (*May 2020 – Present*)

Intermediate Software Engineer

- IRS CADE 2
 - Developed proof-of-concept microservice solutions to modernize tax processing using Java and Spring Batch
 - Developed and maintained modernized tax processing using Java and Spring Batch
 - Triaged runtime errors found during execution in C
- Enterprise Architecture Baseline – Simplified (EnABLS)
 - Designed and implemented new capabilities to EnABLS using AngularJS & PostgreSQL
 - Upgraded and deployed new EnABLS versions for 6 unique sponsors
- CWE Usability
 - Developed CWE website content and improved site capabilities for releases using XML
 - Developed modern PDF generation script for use in deployment pipeline using Python
- IRS IV&V
 - Audit code and project quality for multiple IRS development projects
 - Provide feedback to project teams and enterprise leadership for process improvement
 - Lead follow-on effort to determine the effectiveness of AI in information aggregation aggregating common lessons learned across multiple IV&V efforts.
- Easy Room Reservation App
 - Developed API calls to interface with TRIRIGA
 - Designed & developed Easy Room Reservation app using ReactJS
- Sandalwood Tool Suite
 - Augmented Sandalwood's web-scraping capabilities by scraping relevant data from any web source using Python & JavaScript
- Transform with Resilience during Upgrades to Socio-Technical Systems (TRUSTS)
 - Lead development of the TRUSTS informational website
 - Co-lead study exploring the impact of Agile on system resilience
- Structured Threat Information Expression (STIX) for AIS FIRR
 - Designed and implemented new STIX extensions using Python
- L533 Department Hiring
 - Lead interviews and phone screened internship candidates
 - Modernized interview processes to better fit the company & candidates' needs
- Confidential Army Project
 - Lead operations for dashboard to visualize DevSecOps pipeline

Education

Texas A&M University, College Station, TX (*August 2017 - August 2021*)

- *B.S. in Computer Science*

Publications

Augmenting Agile Software Development to Improve Resilience during Real-World Operation

32nd Annual Symposium of the International Council on Systems Engineering (INCOSE), Detroit, MI

Emily Barrett; Steve Dorton; **Neil M Dwivedi**; Dr. Kelly Neville; Dr. Kris Rosfjord

Professional Society: International Council on Systems Engineering (INCOSE)

System Resilience: A framework and tools for new technology integration

Human Factors and Ergonomics Society Healthcare Symposium, New Orleans, LA

Dr. Kelly Neville; Dr. Poornima Madhavan; Dr. Bianica S Pires; Booth, Matthew; Emily Barrett; Heather E Rosso; **Neil M Dwivedi**; Dr. Kris Rosfjord; Patterson, Emily

A system resilience framework for improving the design of advanced technology

Department of Defense: Measuring Human-Machine (AI) Interactions TEM

Dr. Kelly Neville; Dr. Bianica S Pires; Dr. Poornima Madhavan; Booth, Matthew; Heather E Rosso; **Neil M Dwivedi**; Dr. Kris Rosfjord; Patterson, Emily