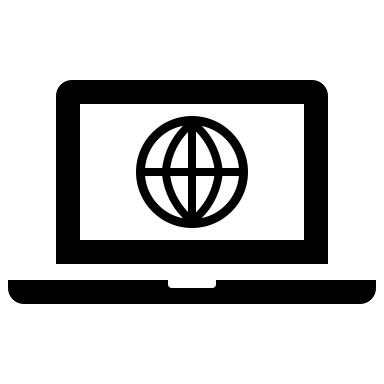
Nadeeshan De Silva

Williamsburg, VA, USA

Github PNG Picture | PNG All

+1 757 332 3331

[Github](https://github.com/NGimhana)

[kgdesilva@wm.edu](http://kgdesilva@wm.edu)

[Google Scholar](https://scholar.google.com/citations?user=TpBmKoYAAAAJ&hl=en&oi=ao)

[personal website](https://ngimhana.github.io/)

[Linkedin](https://www.linkedin.com/in/nadeeshangimhana)

# Statement

# I am a third-year Ph.D. candidate in Computer Science at William & Mary, where Dr. Oscar Chaparro advises me. I am passionate about utilizing {machine, deep} learning, and LLMs to address real-world software engineering challenges. I bring over two years of industry experience as a software engineer and more than three years of independent research experience. My current research aims to enhance automatic code comprehension for better code refactoring.

# Education

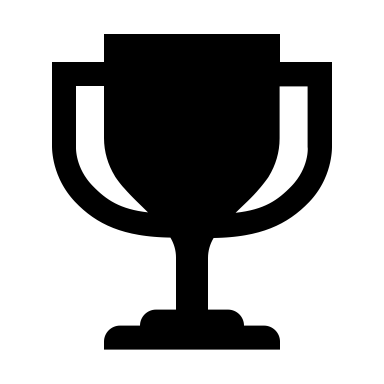
**The College of William and Mary**, Williamsburg, VA Aug 2022 - present

Ph.D. in Computer Science (GPA 4.00/4.00) | Advised by: Dr. [Oscar](https://engineering.purdue.edu/~milind/) Chaparro

**University of Moratuwa**, Sri Lanka Feb 2016 - Jan 2020

B.Sc. Engineering (Hons) in Computer Science & Engineering (GPA 3.53/4.20)

# Publications

* J Mahmud, **Nadeeshan De Silva**, S A Khan, S H Mostafa, S M Hasan Mansur, Oscar Chaparro, Andrian Marcus, and Kevin Moran. “On Using GUI Interaction Data to Improve Text Retrieval-based Bug Localization”. *International Conference of Software Engineering* *(ICSE)* research track 2024 [[pdf](https://arxiv.org/pdf/2310.08083)]
* Y Song, J Mahmud, **Nadeeshan De Silva**, Y Zhou, Oscar Chaparro, Kevin Moran, Andrian Marcus, and Denys Poshyvanyk. “BURT: A Chatbot for Interactive Bug Reporting” *International Conference of Software Engineering* *(ICSE)* 2023 tool demo track [[pdf](https://arxiv.org/pdf/2302.06050)]
* G Gamage, **Nadeeshan De Silva**, I Perera, S Bandara, T Pathirana, A Wickramarachchi, and V Mallawaarachchi “Phylogenetic Tree Construction Using K-Mer Forest-Based Distance Calculation” in *International Journal of Online & Biomedical Engineering*, IJOE 2020 [[pdf](https://online-journals.org/index.php/i-joe/article/view/13807/7197)]
*  (**Best Paper Award**) G Gamage, **Nadeeshan De Silva**, A Wickramarachchi, V Mallawaarachchi and I Perera “Alignment-free Whole Genome Comparison Using k-mer Forests” in *19th International Conference on Advances in ICT for Emerging Regions,* ICTer 2019 [[pdf](https://ngimhana.github.io/files/ijoepp1.pdf)]
* Nuwan Bandara, **Nadeeshan De Silva,** Himasha Guruge “Increasing the Quality of Patient Care through Stream Processing” – White Paper 2019 In [[InfoQ](https://www.infoq.com/articles/patient-care-stream-processing/)]

# Research & Industrial Experience

**Graduate Research Assistant, William & Mary, VA, USA** August 2024- present

* + Conducting machine learning experiments to investigate the effect of relative comprehensibility over absolute code comprehensibility.
  + Investigated the effect of mobile GUI interaction data to improve text-retrieval-based bug localization.

**Senior Software Engineer**, [Enactor](https://enactor.co/), Sri Lanka (Branch of Enactor Limited, Hertford, UK) Feb 2020 - July 2022

* + **Engineered** a customized **React-based POS module** for an enterprise-level client, delivering a more efficient and user-friendly interface.
  + **Enhanced platform code quality by 20%** through systematic refactoring, resolving over **100** **SonarQube-reported issues**, leading to cleaner, maintainable, and efficient code.
  + Engaged in various design, development, deployment, quality assurance, and customer support tasks.

**Google Summer of Code Intern (Open-Source Project)**, The Apache Software Foundation, Remote May 2019 – \_Aug 2019

* [Design](https://drive.google.com/file/d/1b6HZhY6ukrUnUaxKcVqy_LLaMiuz3wlF/view)ed and [implement](https://github.com/apache/oodt/pulls?q=is%3Apr+author%3ANGimhana)ed modularized, reusable React components and Improved JAX-RS-REST APIs for [Apache OODT](https://oodt.apache.org/) 2.0. [[project](https://summerofcode.withgoogle.com/archive/2019/projects/5432463780741120)]

**Software Engineer Intern,** WSO2, Sri Lanka June 2018 - Dec 2018

* + Developed a prototype for a Healthcare Data manipulation that supports global HL7/FHIR standards.

(Kafka/Zookeeper mechanism, stream processing-based data processing) and published a white paper in InfoQ [[paper](https://www.infoq.com/articles/patient-care-stream-processing/)]

# Skills

* Programming Languages: Python, Java, Bash, CUDA
* Operating Systems: Unix/Linux, MacOS
* Frameworks: Scikit-learn, PyTorch, Docker, React, Android

# Achievements

* Received International Student Opportunity Scholarship from William and Mary, VA, USA 2024
* Received ACM SIGSOFT travel grant to attend the International Conference on Software Engineering (ICSE). 2024
* Recognized for academic excellence on graduating with SGPA 3.98 /4.2 with an A+ for the bachelor’s Thesis project. 2020
* The Best Paper Award at the International Conference on Advances in ICT for Emerging Regions(ICTer) 2019
* World Rank 330/7000+ - Deng AI-Driven Data competition 2019
* Sri Lankan Finalists – TAD Hack (Computer Vision based application to convert handwriting to PDF near real-time) 2017

# Professional Qualifications/Activities

* Presented my research at the International Conference on Software Engineering (ICSE) April 2024
* Volunteer ESSEC (Eastern Atlantic Students in Software Engineering Colloquium), William & Mary, Williamsburg, VA. Jan 2024
* Student Volunteer ICSME (The International Conference on Software Maintenance and Evolution) Oct 2023
* Mentor and Judge @ Cypher VIII Hackathon at William and Mary, Williamsburg, VA Oct 2022, Nov 2023
* Appointed as Apache OODT Project Management Committee (PMC) Member and Committer. April 2021