

MADHUKARA KEKULANDARA

+1 401-212-0642

mkekulandara@uri.edu

2590 Kingstown Road, Apt.3, Kingston, RI, 02881

PROFESSIONAL PROFILE

- A Graduate researcher in computer science with a research interest in the area of Data Science, Cryptology, and Blockchain technology.
- 3 years' software development experience, including involvement in the development of 2 mobile apps, 3 web systems, RFID tracking system.
- Experience working with PCI DSS approved systems.
- Programming Skills: Java(J2EE), Python, Web Services (REST API), SQL (Oracle, MySql), Php, Prolog, Javascript, HTML/CSS, Shell scripting, ML
- Tools and Technologies: Flask, Jupyter Notebook, Anaconda, Ipython, Tensorflow, Spring (MVC, SpringBoot), Hibernate, Gradle, Maven, Junit, Mockito, JWT, OAuth, Linux (Ubuntu), Windows, Mac OS, Jetty, Tomcat, AWS, Postman, Rest Client, Eclipse, IntelliJ, Angular, Bootstrap, GIT, Bitbucket, Github, Jira, Trello, WordPress

RESEARCH WORK

A Blockchain-based auditable and secure voting system

- A study was conducted to create a new electronic voting system based on blockchain technology to improve the security and audibility of the existing systems.
- End-to-end encrypted server communication using El-Gamal cryptosystem.
- New Server authentication method using Fiat Shamir Zero-Knowledge protocol. (Blockchain, Bitcoin, Zero-Knowledge protocol, Proof of work, Cryptographic hashing (SHA-256), Python, Flask, REST-API, QR-Codes, RSA encryption, Public-key cryptography)

Improve patient safety by analyzing data quality in healthcare databases

Graduate Researcher - Rhode Island quality institute, Brown University, URI

- Developed a data quality scoring system to quantify the quality of the data collected by healthcare service providers.
- Worked as the lead Research Assistant in the team and supervising undergrad research assistants. (Python, Machine Learning, Deep Learning, word embedding, paragraph embedding, word2vec, doc2vec, Jupyter notebook, Bag of word, Stanford NLP)

Automated assignment grader using Natural Language Processing

Graduate Research Assistant - AI Lab, URI

- An AI system using natural language processing concepts to predict scores for student's open-ended responses on quizzes.
- Worked as the lead Research Assistant in the team and supervising undergrad research assistants. (Python, Machine Learning, Deep Learning, word embedding, paragraph embedding, word2vec, doc2vec, Jupyter notebook, Bag of word, Stanford NLP)

EDUCATION

Doctor of Philosophy <i>Computer Science</i> University of Rhode Island	2020 – in progress RI, USA
Master of Science <i>Computer Science</i> University of Rhode Island	2018 – 2020 RI, USA
Bachelor of Science <i>Special: Computer Science — First Class Honours</i> University of Kelaniya	2011 – 2015 Sri Lanka

WORK EXPERIENCE

Teaching Assistant Department of Computer Science and Statistics University of Rhode Island	August 2018 – Present RI, USA
Instructor Department of Computer Science and Statistics University of Rhode Island	May 2019 RI, USA

Tuition scholarship would be great benefit to a international student like to continue my final stage of Phd work as it would provide me necessary support to focus on my work without worrying about financial needs.

SOFTWARE DEVELOPMENT EXPERIENCE

Senior Software Engineer Ideahub, Colombo, Sri Lanka	September 2016 - August 2018
Associate Software Engineer, Virtusa, Colombo, Sri Lanka	December 2015 - August 2016
Associate Software Engineer, Eimsky, Colombo, Sri Lanka	December 2014 - November 2015

PROFESSIONAL QUALIFICATIONS

Professional Graduate Diploma in IT British Computer Society (BCS)	2015
--	------

***** END *****