# Dasun Srimal Athukorala

Curriculum Vitae

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✤ Google Scholar

# **Research Interests**

Machine Learning, Deep Learning, Geneartive AI, Game Theory, Cloud Computing

# Education

# Florida International University 🖉

Postgraduate Diploma

- Major: Electrical & Computer Engineering
- Advised by: Prof. Ismail Guvenc & , Prof. Walid Saad & , Prof. Mehdi Bennis &
- Courses: Machine Learning, Random Signal Principles, Signal Estimation Theory, Signal Detection Theory, LTE, Wireless Digital Communication, Research

#### University of Moratuwa 🖉

Bachelor of Science (BSc) in Engineering with Honours

- Major: Electronics & Telecommunication Engineering
- Minor: Mathematics
- Advised by: Dr. Ajith Pasqual & , Prof. Rohan Munasinghe &

# **Research Experience**

#### **Graduate Research Assistant**

Department of Electrical & Computer Engineering, Florida International University

• Research Area: Application of reinforcement learning and game theory for spectrum sharing, LTE in Unlicensed Spectrum @

#### **Undergraduate Researcher**

Department of Electronic & Telecommunications Engineering, University of Moratuwa

content online, and managed industry partnerships.

- Research Area: V2X Communications
- Thesis Topic: IEEE WAVE (802.11p/1609.x) based adaptive traffic light control system for a four way junction using vehicle to vehicle (V2V) communication @

# **Professional Experience**

#### Founder & Lead Lecturer NirvanaClouds Academy &

Developed courses from scratch, crafted the curriculum, delivered lectures, created labs, published

# Founder/CEO & Chief Architect

NirvanaClouds ∂

Oversaw the development of cloud-native software systems for SMEs, specializing in cost-effective solutions. As founder, facilitated team building, strategic planning, and partnership establishment.

# Founder/CEO & CTO

XellMart @

Led market research, product development, financing, team building, sales, and marketing. Developed the MVP as CTO, overseeing algorithm design, system architecture, and full-stack web development.

Jun 2008 – Apr 2013 Katubedda, Sri Lanka

Aug 2015 - Aug 2016 | Miami, USA

Aug 2015 - Aug 2016 | Miami, USA

May 2022 – present | Colombo, Sri Lanka

Oct 2020 – present | Colombo, Sri Lanka

Nov 2018 - Sep 2020 | Singapore

Sep 2011 – Dec 2012

Katubedda, Sri Lanka

# Independent Learning

Self-taught in Cloud Computing & Building Tech Startups

Mastered both Amazon Web Service (AWS)  $\mathscr{A}$  and Google Cloud Platform (GCP)  $\mathscr{A}$ , and learned to build advanced cloud native software applications.

#### **Engineer - Radio Access Network**

Sri Lanka Telecom-Mobitel 🔗

Managed a wide array of tasks involving planning, design, and testing of Radio Access Network (RAN), encompassing LTE and WiFi technologies. Led the end-to-end deployment of WiFi sites with LTE backhauling.

# **Engineering Intern**

Sri Lanka Telecom 🔗

Obtained experience in CDMA, International Transmission and Switching.

#### **Teaching Experience**

Al-Powered Python Programming: Enhancing Code with ChatGPT ♂ Lecturer, NirvanaClouds Academy	Jul 2023 – present   Sri Lanka	
Cloud Software Development & Lecturer, NirvanaClouds Academy	Apr 2023 – Jul 2023   Sri Lanka	
<b>Enterprise Cloud &amp; Distributed Web Applications</b> <i>A</i> Lecturer, Staffordshire University	Jul 2022 – Feb 2023   UK	
<b>Enterprise Cloud and Infrastructure Automation</b> <i>P</i> Lecturer, Staffordshire University	Mar 2022 – Oct 2022   UK	
<b>Web Development and Operating Systems</b> <i>&amp;</i> Lecturer, Staffordshire University	Mar 2022 – Feb 2023   UK	
Publications		
Regret based learning for UAV assisted LTE-U/WiFi public safety networks & IEEE Global Communications Conference (GLOBECOM) D. Athukoralage, I. Guvenc, W. Saad, and M. Bennis	Dec 2016	
IEEE WAVE (802.11P/1609.X) based adaptive traffic control system for a four way junction using vehicle to vehicle (V2V) communication & B.Sc. Dissertation, University of Moratuwa D. Athukoralage, K. Sirimanna, L. Rupananda, A. Pasqual	Apr 2013	
Grants		
Pervasive Spectrum Sharing for Public Safety Communications, NSF & Grant numbers AST-1506297, ACI-1541105	2015 – 2016   USA	
My research work was supported in part by above NSF grants.		
Research Assistantship Florida International University	Aug 2015 – Aug 2016   Miami, USA	
Offered by Prof. Ismail Guvenc 🔗 , which included a stipend and a tuition waiver.		
Professor C.R. Kulathilaka Scholarship2008   Sri LankaDepartment of Public Trustee2008   Sri Lanka		
A scholarship for achieving the highest score in Pure Mathematics in the university placement exam (1st place out of 23,909 candidates).		

Feb 2011 – Aug 2011

Colombo, Sri Lanka

Feb 2013 – Jul 2015 | Colombo, Sri Lanka

# Dialog Merit Scholarship Program 🔗

Dialog Axiata PLC and University Grants Commission

48-month funding scholarship for the best student in the physical science stream in the university placement exam.

## Mahapola Merit Scholarship

Sri Lankan Government

A scholarship for students with the highest aggregate score in the university placement exam to pursue an undergraduate degree in engineering.

## Awards

# Spectrum-Sharing Radio Contest (Spectrum-ShaRC) - Phase1 @

Bradley Department of Electrical and Computer Engineering, Virginia Tech, Blacksburg, VA.

A PHY layer design contest for the implementation of cognitive engines (CEs) using C++. I led the Florida International University team, which obtained fourth place out of 18 universities.

<b>The Dean's List</b> Faculty of Engineering, University of Moratuwa	2013
Ranked 22nd in Sri Lanka (top 0.1%) in the GCE Advanced Levels with distinctions 🔗	Dec 2007

Sri Lankan Government

Obtained the highest distinctions in Mathematics, Physics, and Chemistry.

#### Skills

- Languages: Python, JavaScript, HTML/CSS, Bash, SQL, C++
- Frameworks: PyTorch, NumPy, Tensorflow, scikit-learn, Elasticsearch
- DevOps: Docker, Kubernetes, Google Cloud, AWS, VMware, Continuous Integration
- Misc: Unix, shell, git, vim, LaTeX
- Advanced: API Design & Development, Full Stack Web Development, Algorithms and Data Structures, Numerical Optimization Methods, Machine Learning

# Projects

#### Project Flux , Singapore 🖉

(As the Chief Architect of NirvanaClouds)

Developed an interactive web portal for one of our Singapore clients, which can be used to discover COVID-19 test requirements, quarantine protocols, and entry restrictions for all 230+ countries worldwide during the COVID-19 pandemic period.

An optimal jamming power allocation strategy for localization in wireless networks Florida International University, Miami, FL	Jan 2016 – Mar 2016
Developing a mobile robot for Robot Design and Competition University of Moratuwa, Katubedda, Sri Lanka.	Sep 2009 – Dec 2009

#### **Student Mentorship**

Software Engineering Trainer and Mentor *∂* NirvanaClouds

Conducted training sessions for software engineering trainees/interns, covering Software Engineering Principles, Cloud Computing Paradigms, Production-level API development, and DevOps/CI-CD processes.

2008 – 2012 | Sri Lanka

Sep 2021 – Dec 2021

Oct 2020 – present | Colombo, Sri Lanka

Nov 2015