

Curriculum Vitae

(Short Version)

Mugabarigira Bien Aime

mubienaime@gmail.com, +82-10-5964-8794

Department of Electrical and Computer Engineering, Sungkyunkwan University, Suwon, South Korea

• Education and Training

09/2015-Now	Electrical and Computer Engineering, Sungkyunkwan University, Suwon, South Korea	Ph.D Candidate
01/2009-11/2012	Computer Science and Systems, National University of Rwanda, Huye, South Province, Rwanda	B.S.

• Previous Appointments

	Teaching Assistant of following courses:	
2015-2021	<ul style="list-style-type: none">March 2021 - June 2021: Infrastructure Networks and SecurityMarch 2020 - December 2020: Introduction to Computer NetworksSeptember 2015 - December 2015: Creative Design Project	
09/2012 – 08/2015	High School Teacher, Parents High School (“Groupe Scolaire des parents” (GSP)), Huye, Southern Province, Rwanda	

• Research Interests

Internet of Things (IoT), Cyber-Physical Systems (CPS), Vehicular Networks, Vehicular Ad-Hoc Networks (VANET), and Flying Ad-Hoc Networks.

• Publication (Journal, Conference, Internet Standard, & Patent)

■ Journal Papers

1. Bien Aime Mugabarigira, Yiwen (Chris) Shen, Jaehoon (Paul) Jeong, Tae (Tom) Oh, and Han-You Jeong, "Context-Aware Navigation Protocol for Safe Driving in Vehicular Cyber-Physical Systems", IEEE Transactions on Intelligent Transportation Systems, CNP supplemental material, Vol. 24, No. 1, pp. 128-138, January 2023.
2. Hamayoun Shahwani, Bien Aime Mugabarigira, Yiwen (Chris) Shen, Jaehoon (Paul) Jeong, and Jitae Shin, "DAFP: Delay-Aware Packet Forwarding for Driving Safety and Efficiency in Vehicular Networks", IET Communications, January 2020.

■ Conference Papers

1. Yiwen Shen, Bien Aime Mugabarigira, and Jaehoon (Paul) Jeong, "A Deep Reinforcement Learning Framework for Connected Vehicle Route Planning in Urban Environments", KICS-2025-Winter, Pyeongchang, Korea, February 5 to February 7, 2025.
2. Bien Aime Mugabarigira, and Jaehoon (Paul) Jeong, "Context-Aware Navigation Protocol for Safe Flying of Unmanned Aerial Vehicles", KICS-2024-Winter, Pyeongchang, Korea, January 31 to February 2, 2024.
3. Junhee Kwon, Bien Aime Mugabarigira, and Jaehoon (Paul) Jeong, "Web-Based Car Control and Monitoring for Safe Driving of Autonomous Vehicles", International Conference on Information Networking (ICOIN), Jeju, Korea, January 12-15, 2022.
4. Bien Aime Mugabarigira, Yiwen (Chris) Shen, Daegeun Choe, and Jaehoon (Paul) Jeong, "Context-Aware Navigator for Road Safety in Vehicular Cyber-Physical Systems", The Third International Conference On Consumer Electronics (ICCE) Asia, Jeju, Korea, June 24-26, 2018.
5. Daegeun Choe, Yiwen (Chris) Shen, Bien Aime Mugabarigira, and Jaehoon (Paul) Jeong, "Extensible Intelligent Simulator Architecture for the Development of Cyber-Physical Systems", The Third International Conference On Consumer Electronics (ICCE) Asia, Jeju, Korea, June 24-26, 2018.
6. Hamayoun Shahwani, Bien Aime Mugabarigira, Jitae Shin, and Jaehoon Paul Jeong, "An Effective Data Processing and Data Dissemination in Vehicular Networks", The 12nd ACM International Conference on Ubiquitous Information Management and Communication (IMCOM), Langkawi, Malaysia, January 2018.

7. Bien Aime Mugabarigira, Yiwen (Chris) Shen, Jaehoon (Paul) Jeong, Tae (Tom) Oh, and Sang Hyuk Son, "Design and Implementation of Vehicular Network Simulator for Data Forwarding Scheme Evaluation", 31th International Conference on Advanced Information Networking and Applications Workshops - Device Centric Cloud (DC2), Taipei, Taiwan, March 27-29, 2017.
8. Yiwen (Chris) Shen, Bien Aime Mugabarigira, and Jaehoon (Paul) Jeong, "IPv6 Vehicular Communications over IEEE 802.11-OCB Wireless Link", KICS-2020-Winter, February 2020.

- **Internet Drafts**

1. Jaehoon Paul Jeong and Bien Aime Mugabarigira, "Applicability of Computing-Aware Traffic Steering to Intelligent Transportation Systems", draft-jeong-cats-its-use-cases-02, November 2024.
2. Jaehoon Paul Jeong, Bien Aime Mugabarigira, Yiwen (Chris) Shen, Alexandre Petrescu, and Sandra Cespedes, "Basic Support for IPv6 Networks Operating over 5G Vehicle-to-Everything Communications", draft-jeong-6man-ipv6-over-5g-v2x, April 2024.
3. Jaehoon Paul Jeong, Bien Aime Mugabarigira, Yiwen (Chris) Shen, and Zeung Il Kim, "Context-Aware Navigation Protocol for IP-Based Vehicular Networks", draft-jeong-ipwave-context-aware-navigator, March 2024.
Jaehoon Paul Jeong, Bien Aime Mugabarigira, and Yiwen (Chris) Shen, "Vehicular Mobility Management for IP-Based Vehicular Networks", draft-jeong-ipwave-vehicular-mobility-management, February 2024.

- **Patents**

1. Jaehoon Paul Jeong, Bien Aime Mugabarigira, and Yiwen (Chris) Shen, "Apparatus and method for providing basic support for ipv6 networks operating over 5g vehicle-to-everything communications", US patent pending, August 2024.
2. Jaehoon Paul Jeong, Bien Aime Mugabarigira, and Yiwen (Chris) Shen, " Context-aware navigation protocol for safe driving ", US patent Granted, September 2023.