



1. **Name and Academic Rank:** Semaan Elias Amine, Assistant Professor, full time
2. **Education: Degrees, Discipline, Institution and Date:**
 - Ph.D., Mechanical Engineering, ‘Ecole Centrale de Nantes’, 2011
 - M.Sc., Mechanical Engineering, ‘Ecole Centrale de Nantes’, 2008
 - B.Sc., Mechanical Engineering, Lebanese University, 2008
3. **Work experience**
 - Beirut Arab University (BAU), Assistant Professor, Spring 2015- present, full time
 - Beirut Arab University, Instructor, Fall 2012 to Fall 2014, part time
 - Notre Dame University, Instructor, Fall 2014, part time
 - American University of Science & Technology, Instructor, Spring 2013 to Fall 2014, part time
4. **Honors and Awards:**
 - 2017 – Lebanese Industrial Research Achievements (LIRA) Program fund award for the senior project entitled “Automated Vehicle Parking System”
 - 2016 – LIRA Program fund award for the senior project entitled “Paper-waste Cutting, Compressing & Packing Machine.”
5. **Service activities**
 - Member of the **Lebanese Industrial Research Achievements Program’s** administrative committee for the academic year 2017-2018.
 - Member of the Faculty of Engineering **Quality Unit** at BAU for the academic years 2016-2017 and 2017-2018.
 - Member of the Faculty of Engineering **Scientific Research Unit** at BAU for the academic year 2016-2017.
 - Member of **BAU Engineering Projects Day committee** for the academic year 2015-2016.
 - Member of **BAU University Ranking committee** for the academic year 2015-2016.
6. **Research Interests**
 - Robot Kinematics
 - Vehicle Handling Dynamics
 - Fuzzy Logic Control
7. **International Scientific Activities and Research Cooperation**
 - January 2017, Visiting Professor, Laboratoire des Sciences du Numérique de Nantes, Ecole Centrale de Nantes, Teaching and Research Collaboration with Dr. Stéphane Caro.
 - July 2015, Visiting Professor, Laboratoire des Sciences du Numérique de Nantes, Ecole Centrale de Nantes, Teaching and Research Collaboration with Dr. Stéphane Caro.
8. **National Research Cooperation**
 - None
9. **Principal publications and presentations:**
 - 9.1 **Journal Publications**
 1. **Amine, S.**, and Mokhiamar, O., “Robust Integrated Control of Wheel Slip and Direct Yaw Moment for Stabilizing the Dynamics of Skid-Steering Vehicles”, International



- Review of Mechanical Engineering (I.R.E.M.E.), Praise Worthy Prize, 11(8), pages 562-572, 2017.
2. Mokhiamar, O., and **Amine, S.**, “Lateral Motion Control of Skid Steering Vehicles using Full Drive by Wire System”, Alexandria Engineering Journal, 56(4), pages 383–394, 2017.
 3. **Amine, S.**, Mokhiamar, O., and Caro, S., “Classification of 3T1R Parallel Manipulators Based on Their Wrench Graph”, ASME Journal of Mechanisms and Robotics, 9(1), No. 011003, pp. 1–10, 2016.
 4. **Amine, S.**, Tale Masouleh, M., Caro, S., Wenger, P., and Gosselin, C., “Singularity Conditions of 3T1R Parallel Manipulators with Identical Limb Structures”, ASME Journal of Mechanisms and Robotics, 4(1), No. 011011, pages 1–10, 2012.
 5. **Amine, S.**, Tale Masouleh, M., Caro, S., Wenger, P., and Gosselin, C., “Singularity Analysis of 3T2R Parallel Mechanisms using Grassmann-Cayley Algebra and Grassmann Line Geometry”, Mechanism and Machine Theory, 52, pages 326–340, 2012.
 6. **Amine, S.**, Caro, S., Wenger, P., and Kanaan, D., “Singularity Analysis of the H4 Robot using Grassmann-Cayley Algebra”, Robotica, Available on Cambridge Journals Online (CJO), 30(7), pages 1109–1118, 2012.
 7. **Amine, S.**, Tale Masouleh, M., Caro, S., Wenger, P., and Gosselin, C., “Singularity Analysis Of The 4-RUU Parallel Manipulator Using Grassmann-Cayley Algebra”, Transactions of the Canadian Society for Mechanical Engineering, 35(4), pages 515–528, 2011.

9.2 Papers Book Section

1. **Amine, S.**, Kanaan, D., Caro, S., and Wenger, P., “*Singularity Analysis of Lower-Mobility Parallel Robots with an Articulated Nacelle*”, Advances in Robot Kinematics: Motion in Man and Machine 2010, Part 5, pages 273-282. Springer, 2010.

9.3 Conference Proceedings

1. **Amine, S.**, Nurahmi, L., Wenger, P., and Caro, S., “Conceptual Design of Schoenflies Motion Generators based on the Wrench Graph”, Proceedings of the ASME 2013 International Design Engineering Technical Conferences, DETC2013-13084, Portland, Oregon, USA, August 4-7 2013.
2. **Amine, S.**, Caro, S., and Wenger, P., “Constraint and Singularity Analysis of the Exechon”, XI International Conference on Mechanisms and Mechanical Transmissions (MTM) and the International Conference on Robotics (Robotics’12), Clermont-Ferrand, France, June 6–8, 2012.
3. **Amine, S.**, Tale Masouleh, M., Caro, S., Wenger, P., and Gosselin, C., “Singularity Analysis of the 4-RUU Parallel Manipulator based on Grassmann-Cayley Algebra and Grassmann Geometry”, Proceedings of the ASME 2011 International Design Engineering Technical Conferences, DETC2011-48226, Washington, DC, USA, August 29-31 2011.
4. **Amine, S.**, Tale Masouleh, M., Caro, S., Wenger, P., and Gosselin, C., “Singularity Analysis of 5-DOF Parallel Mechanisms 3T2R using Grassmann-Cayley Algebra”, 13th IFToMM World Congress in Mechanism and Machine Science, Guanajuato, México, June 19-25 2011.
5. **Amine, S.**, Kanaan, D., Caro, S., and Wenger, P., “Constraint and Singularity Analysis of Lower-Mobility Parallel Manipulators with Parallelogram Joints”, Proceedings of the ASME 2010 International Design Engineering Technical Conferences, DETC2010-28483, Montreal, Québec, Canada, August 15-18 2010.