

SERGIU P. ILIEV

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British-Romanian Citizen

OBJECTIVE	To work with exceptional and passionate people on practical and impactful projects that can shape the world.	
ENGINEERING EXPERIENCE	Destinus: Systems and Flight Test Engineer, Payerne Airbase, Switzerland	Oct. 2021 - present
	- Led systems engineering and flight testing for hypersonic vehicle prototypes, advancing propulsion systems including kerosene, hydrogen jet, and solid rocket engines. - Coordinated the construction and commissioning of the H2 Test Park, a liquid hydrogen test facility. - Patented and prototyped a "Remote Landing Gear" system for versatile aircraft operations. - Gathered engineering traction helping grow the startup from 10 to 200+ employees in 3 years.	
	Spacept: Founder and CTO of ML aerospace start-up based in Stockholm & NYC	Jan. 2019 - present
	- Recruited and led stellar teams to launch an AI system for monitoring infrastructure from space. - Built and managed partner and customer relationships. Orchestrated company strategy and tactics. - Spearheaded fundraising and secured investment deals to a valuation of \$2 million.	
	Outsmart Insights: Aerospace Engineering Consultant, Future Concepts Team, UK	Apr. 2016 - Jan. 2019
EDUCATION	- Collaborated with teams of engineers and researchers to identify and implement disruptive technologies in the Military Air & Information Department of BAE Systems throughout Europe. - Advised the Future Concepts Bureau in designing a 6th generation jet fighter, publicly known as <i>Tempest</i>.	
	Imperial College London: Undergraduate Research Assistant in London, UK	Jun. - Aug. 2014
	- Invented test methods and led novel cryogenic mechanical testing of supercooled metal samples. - Led experimental research on multi-million-dollar equipment and published several journal papers.	
	Carnegie Mellon University, Pittsburgh, PA	Fall 2019 - Fall 2020
	Graduate work completed towards a doctorate in Mechanical Engineering with a GPA of 4.0 / 4.0. - Research in Artificial Intelligence for patient-specific medical models utilizing wearables data. - Courses included AI, Bayesian Machine Learning, Surgery, Advanced Physiology, Human Factors, etc.	
INTERNATIONAL BUSINESS EXPERIENCE	Imperial College London, London, United Kingdom	Fall 2012 - Summer 2016
	Master's and Bachelor's in Aerospace Engineering (MEng, ACGI) with 1 st class honors (equivalent to GPA 4.0). Published several papers in international science journals, full list available at iliev.us/publications.	
	Courses included: Aerospace Vehicle Design, Materials Science, Aerodynamics, Orbital Mechanics, Structural Dynamics, Control Systems, Advanced Propulsion, Ethics, CAD, FEA, CFD etc.	
	Entrepreneur First: Founder of a blockchain aerospace venture in London, UK	Apr. - Sep. 2018
	Designed an investment platform for innovative eVTOL projects in partnership with Deloitte and Airbus.	
ADDITIONAL SPACE-SECTOR EXPERIENCE	Citigroup: Business Technology Analyst in the Global Markets Department in London	Aug. 2016 - Apr. 2018
	Developed computational models to evaluate and control risk in equity investments.	
	Institut für Raumfahrtssysteme: Space Station Design Workshop Project Manager	Jun. - Jul. 2016
	Directed a team of 20 engineers to design a space station at the University of Stuttgart in Germany.	
	Russian Space Agency: International Nanosatellite Design Collaboration in Samara, Russia	Aug. - Sep. 2014
SOFTWARE & PROGRAMMING SKILLS	European Space Agency Space Weather Satellite Design Contest in Alpbach, Austria	Aug. - Sep. 2013
	Developed propulsion and attitude control systems, optimized orbit transfers doubling capabilities.	
	Advanced knowledge of data science and engineering languages (MATLAB, Python) and machine learning frameworks (Keras, Pytorch) and SQL databases; beginner knowledge of C# and Java ; excellent CAD software (Autodesk, ProE) experience; expert in Microsoft Office Word, Excel, PowerPoint, Project, and Access.	
EXPERIMENTAL TESTING SKILLS	Improved Battery Testing processes from Toyota Research leveraging Artificial Neural Networks.	
	Invented, fabricated, and tested aircraft structures, micro-robots, exoskeletons, and multi-rotor drones.	
	Subsonic and supersonic wind tunnels operation in testing of aircraft models, racecars, and wind turbines.	
	Prototype manufacturing experience (3D printing, laser cutting, turning, milling, CNC machining).	
SELECTED AWARDS	Uventure Artificial Intelligence Prize , by the <i>Samsung Strategy and Innovation Center</i>	2020
	Space Science Early Research Career Award , by <i>SGAC</i> and the <i>US National Academy of Sciences</i>	2019
	Recipient of 10+ scholarships including the Project Merit Prize for the best-in-class dissertation	2016
LEADERSHIP	Founder training from the Katapult, Antler, and European Space Agency startup accelerators	2019
	Highest leadership certification (level 5) from the UK Institute of Leadership and Management	2016
	Imperial College Centenary prize for leading engineering teams in the design of an electric aircraft	2015
LANGUAGES	English: Native level French: Independent level (B1) Russian: Beginner level (A1) Romanian: Native level	
INTERESTS & ACTIVITIES	Drone building and racing, skiing, kiteboarding, photography, swimming, and basketball are my pastimes. I am a certified Master Scuba diver, motorboat & sailing captain, rally driver and recreational sailplane pilot.	