

# SERGIU P. ILIEV

Portfolio [www.iliev.us](http://www.iliev.us)  
Email [sergiu@iliev.us](mailto:sergiu@iliev.us)  
Phone (+1) 426-255-1216  
Citizenship British-Romanian

**OBJECTIVE** To work with exceptional and passionate people on practical and impactful projects that can shape the world.

**EDUCATION** **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.

**Imperial College London, London, United Kingdom** **Fall 2012 - Summer 2016**

Master's and Bachelor's in Aerospace Engineering (MEng, ACGI) with 1<sup>st</sup> class honors (equivalent to GPA 4.0).

- Published several papers in international science journals, full list available at [iliev.us/publications](http://iliev.us/publications).
- Courses included: Aerospace Vehicle Design, Materials Science, Aerodynamics, Orbital Mechanics, Structural Dynamics, Control Systems, Advanced Propulsion, Ethics, CAD, FEA, CFD etc.

**ENGINEERING EXPERIENCE** **Spacept:** Founder and co-CEO/CTO of deep-tech start-up with offices 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 current valuation of \$2 million.

**Outsmart Insights:** Aerospace Engineering Consultant, Future Concepts Team, UK **Apr. 2016 - Jan. 2019**

- 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 6<sup>th</sup> generation jet fighter, publicly known as *Tempest*.

**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.

**INTERNATIONAL BUSINESS EXPERIENCE** **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.

**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.

**European Forum:** Delegate at the 72<sup>nd</sup> 'New Enlightenment' Forum in Alpbach, Austria. **Jul. - Aug. 2016**

**ADDITIONAL SPACE-SECTOR EXPERIENCE** **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**

- Trained with an international team in practical astronautics on Russian spacecraft.

**European Space Agency** Space Weather Satellite Design Contest in Alpbach, Austria **Aug. - Sep. 2013**

- Responsible for propulsion and attitude control systems, optimized orbit transfers doubling capabilities.

**PROGRAMMING SKILLS** Advanced knowledge of **data science and engineering** languages (MATLAB, **Python**) as well as versioning systems (GIT) and database management in SQL; beginner knowledge of C# and Java; excellent **CAD software** (Autodesk) experience. **Microsoft Office Expert** ECDL certificate in 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 *Samsung Strategy and Innovation Center* **2020**

**Space Science Early Research Career Award**, by *SGAC* and the *US National Academy of Sciences* **2019**

**Young Lunar Explorer Prize**, International Astronautical Congress, by *ESA ILEWG* **2018**

**Recipient of 10+ scholarships** including the **Project Merit Prize** for the best-in-class dissertation **2016**

**LEADERSHIP** • Achieved the Level 5 **Institute of Leadership and Management Qualification** and further **startup training** from the Katapult, Antler, and YC business accelerators - all successfully applied in my ventures.

- **Coordinated teams to design and build** a high-altitude scientific balloon and to conceive an innovative non-polluting hybrid propulsion supersonic airplane concept in the Airbus-Fly Your Ideas contest.
- Formed and led a team in the **NASA Space Settlement Design Global Contest** winning the 1<sup>st</sup> prize.

**LANGUAGES** **English:** Native level | **French:** Independent level (B1) | **Russian:** Beginner level (A1) | **Romanian:** Native level

**INTERESTS AND ACTIVITIES** At heart I am an explorer with a curious mind. This is reflected by the sports I practice as throughout the years I became a PADI Master Scuba diver, motorboat and sailing captain, rally driver and recreational sailplane pilot.