ARPIT SHARMA

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Entrepreneur | Founder | Business Strategist | Systems Engineer

PROFESSIONAL SUMMARY

Experienced founder with a dedication to innovation in aviation and aerospace deep-tech. Arpit holds bachelor's and master's degrees in aerospace from IIT Kanpur and has over a decade of experience in deep-tech startups. He has led teams developing aerospace and robotics products, notably contributing to Team Indus' win of the Terrestrial Milestone Prize ($1 Million). *Team Indus was the only Indian entry and a potential team to win the Google Lunar X-Prize.* Later, he co-founded Mechanical Chef, an AI-based kitchen robot. Arpit's strong background and connections in aerospace development are his greatest assets.

Currently, Arpit is working on RangeAero, enabling regional air cargo with autonomous aircraft. RangeAero's autonomy models retrofit existing aircraft and helicopters, converting them into UAS. RangeAero also offers indigenous unmanned helicopters for defense.

STRENGTHS

Leadership
A decade of experience leading cross-functional teams and managing deep-tech projects in tech & business development.

Strategy & Planning
Proficient in executing strategic plans, identifying market opportunities, and implementing innovative solutions.

Team Building
Recruited top engineers from premier institutes, strategic leaders, and experienced advisors leading systems engineering teams.

Deep-Tech Experience
Hardware is hard, but I have built it 4 times and demonstrated expertise in aerospace development, spanning all phases from design to prototyping, manufacturing, testing, and deployment.

AREAS OF EXPERTISE

- ✓ Market research
- ✓ Fundraising & investor relations
- ✓ Business development
- ✓ Strategic partnerships
- ✓ Project management
- ✓ Financial management & forecasting
- ✓ Systems engineering
- ✓ Technical lead & planning
- ✓ Aerospace product development

PROFESSIONAL EXPERIENCE

Founder & CEO, RangeAero Private Limited, Bengaluru, IN | May 2019 – Present
Founded & led RangeAero, in building a world-class autonomous aircraft company developing regional autonomous freighters, for the civil & defense industry. Intro-Deck: (www.range.aero/introdeck); Website: www.range.aero; LinkedIn: www.linkedin.com/company/rangeaero.

- Led RangeAero to secure a $160K defense grant from the Ministry of Defence, India, along with a commitment for prioritized procurement. Additionally, facilitated the acquisition of multiple government grants from the Ministry of Electronics and Information Technology (MeitY), the Department of Science & Technology, and Startup India.
- Successfully raised $250K in funding from private investors. Incubated at the IIM Ahmedabad (IIMA), India's top business school, and Forge Forward, a renowned defense incubator.
- Negotiated and secured $300K in pre-orders from defense and aerospace firms, along with a commitment from the Indian Defense.

- Led multiple demonstrations for Indian Defense (Army & Navy) in the live environments, including Indian Army's live warfare exercises. Product was also public demonstrated at Indian Army Parade Day (https://youtu.be/EZ5HsjoOvJI).
- Led the business team in customer discovery through market research, engaging 10+ aerospace customers.
- Represented RangeAero in high level events such as Aero India (during Indian Prime Minister's visit, https://youtu.be/P5nlY-8jI9U), Defexpo, Indian Navy golden Jubilee celebrations, Strategic Electronics Summit SES.
- Established research partnerships with 2 IITs- India's premier academic institutions, and industrial partnerships with 5+ aerospace firms for co-development. Acted as an industry collaborator with IIT (ISM) Dhanbad on a project funded by the Dept of Science & Technology.
- Assembled and led the leadership, technical, and business advisory teams, along with the systems engineering team. Directed the systems engineering roadmap for product development through all stages, from concept to manufacturing. Successfully oversaw 300+ flight tests of Range Magner under various flight conditions. (https://youtu.be/tVOAQYiX9E4).
- Led and successfully completed Conceptual Design Review (C-DR), Preliminary Design Review (PDR), and Detailed Design Review (DDR) for autonomous helicopters (20 kg and 60 kg AUW UAS), evaluated by a 20-member external jury of experts from academia, aviation, and helicopter industry.
- Developed a robust local supply chain for prototyping, testing, and final product assembly, engaging key stakeholders including national and international aerospace component suppliers, manufacturers, and export-import consultants.
- Ensured full compliance for RangeAero across statutory, legal, export-import (EXIM), human resources, and taxation requirements.

Co-founder & CTO, Mechanical Chef (LLP), Bengaluru, IN | April 2017 – Nov 2018
Co-founded & led Mechanical Chef- a kitchen robot company for customized cooking. The AI-controlled Mechanical Chef was the first cooking robot which can cook a full-course meal, automatically. Website: www.mechanicalchef.com; LinkedIn: www.linkedin.com/company/mechanicalchef.

- Established and led the Systems Engineering team, overseeing the development of three product iterations from initial concept through to final assembly and live testing. Invented and secured a patent for the innovative technology. (https://patents.google.com/patent/US20200359845A1/)
- Demonstrated the product publicly at MakerFaire 2017 and, in collaboration with the CEO, organized and managed over 150 field trials with end-customers. (https://youtu.be/XC5GeFu4Yjg)
- Directed the company's successful acquisition of an innovation grant from the Department of Science & Technology.
- Negotiated strategic contracts with leading consumer electronics companies in India alongside the CEO, establishing long-term partnerships for enhanced market penetration.
- Received widespread media recognition from top news outlets. (https://youtu.be/7ovHkeWjYPI, Google Drive Link)

Systems Engineer, Team Indus (Axiom Research Labs Pvt Ltd), Bengaluru, IN | Aug 2013 – June 2015
Joined as an early team member, quickly advancing to lead the Lunar Lander's structures and Lunar Rover teams. Contributed significantly to Team Indus achieving a top 3 position in the Google Lunar X Prize (GLXP).

- Direct reported to the CEO, awarded a responsibility to recruit, form & nurture a systems engineering team to develop a Lunar rover. Oversaw design, reviews and test methods from conceptual to detailed design. Carried out 2-level of prototyping with functional tests.
- Defined sub-system level strategies & rover mission plans which contributed to win Terrestrial Milestone Prize to the team.

- Worked with the CEO to define the overall product development cycles for Lunar rover, for the cost & time-effective development.
- Devised an interface for the technical requirements to adopt additional payloads from the external teams.
- Collaborated with the technical experts to define a robust design philosophy considering the innovative testing approaches.
- Led procurement, manufacturing, and the development of test setups, for various components of the space mission.

OTHER EXPERIENCES
Tech Lead, Plank Sky (Xphase Solutions Pvt Ltd), Bengaluru, IN | Nov 2015 – Feb 2017

EDUCATION & RESEARCH

B.Tech & M.Tech (Dual Degree), Aerospace Engineer, IIT Kanpur, IN

PATENTS & PUBLICATIONS

1. Cooking robot for the home. India Patent Office, PCT Application Number: PCT/IN2018/050754 **2. Apparatus for dispensing solid food ingredients which is suitable for use in a cooking robot.** (Provisional) India Patent Office Application Number: 201741040810 **3. Simple cooking robot for the automatic preparation of multiple dishes.** (Provisional) India Patent Office Application Number: 201841001318 **4. Prospect for UV observations from the Moon.** Astrophysics and Space Science (2014) 353:329–346 **5. Dynamic Mechanical Behavior of Resin/Hardener Ratio Based Epoxy Variants.** XVII National Seminar on Aerospace Structure (NASAS)

OTHER ACHIEVEMENTS

Arpit is an avid cyclist & a runner. He has been awarded 5 times, a *SUPER RANDONNEUR (SR)* title in endurance cycling.