Post-graduate study on Nano-Satellite Technologies (PNST) Experience Webinar

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Self Introduction

Seoul National University (2010-2016)
(under Prof. Jeung with SNUSAT Projects)

Kyushu Institute of Technology (2017-2020)
• PhD under Prof. Mengu Cho
• BIRDS-3 Satellite Project [3x1U]
• KITSUNE Satellite Project [6U]

Antarikchya Pratisthan Nepal (Space Foudation)
Unique Edu. Program

All taught courses taught in **english**
Complete course on Satellite Technology

Industry/JAXA experts involved
Special lectures on Law, Entrepreneurship
Interactions with Astronauts and leaders in the field
Book and research seminars

Theoretical knowledge complimented by PBL*
*Project Based Learning*
Hands-on Satellite Project(s)

End-to-End satellite development
• Find requirements from stakeholders
• Directly involved in dialogue with governments
• Build and test satellite design
• Finalize design and launch satellite
• Coordinate frequency and build ground stations
• Operate satellite and analyze data

Multiple satellite projects
Lessons and know-how passed on by previous projects
Research Activities

Aritificial Intelligence (Machine Learning)
Edge computing, edge inference

Improving existing satellite BUS system
Focus on inhouse system design and improvement
Open sourcing and mainting systems

Research seminars every Wednesday
Research journals and conference papers
International/National conference attendance
State-of-Art Facilities

CeNT (Center for Nano-Satellite Testing)
• Thermal Vacuum Chamber
• Vibration Shaker
• Shock
• Anechoic Chamber
• Clean room for integration
Upto 50 kg class satellite

Context: We used fly from Korea to test our satellite at Kyutech
Building Connections

Multiple generation of satellite teams
Supporting and helping each other
Form tight community
Support of world class faculty

Prof. Maeda:
“It’s not what you know, it’s who you know”

20-30 countries involved at any given time
Alumni network is supporting the work at home
Life Outside Campus

Kokura, Mojiko and Simonoseki
Fukuoka is closest, largest city
Kyushu as an island is famous for ”onsen”

Plenty of housing options

Gym facility
Onsen (Hot springs)
24-hour “Combi” stores
Shopping areas and restaurants nearby
Take leadership role
Build infrastructure from ground up
Work with alongside the government
Lead satellite projects and replicate work
Invest in building human resource
Raise funds and lobby for funds
Organize conferences and conduct outreach
Cultivate relationships nationally/internationally

Alumni network is the biggest asset
Thank You