As human society continues to change, alter, and modify the planet we live on, our impact on the environment is increasingly apparent. Global climate change and biodiversity loss are now the foremost challenges our generation faces within this changing world. To enact effective conservation actions and plans, researchers and policymakers require reliable monitoring data and analyses, and remote sensing has emerged as an irreplaceable source of this information. Calvin will present on the variety of projects that he has worked on, combining different types of remote sensing, including satellites, drone, and camera traps, with statistical, machine learning, and deep learning methods. Information derived from this research was then applied to global conservation assessment frameworks, such as the IUCN Red List of Ecosystems, generating information to assess global ecosystem status. Currently, Calvin’s research focus has moved towards working within Hong Kong, using the abundant of data available here to conduct ecosystem services assessments and to answer forest restoration-related questions that can be used to inform the Hong Kong’s land management policies.