

# Brandon van Schaik MSc.

6 Sept. 1999 (23) · [Lausanne](#) · [brandonvanschaik@outlook.com](mailto:brandonvanschaik@outlook.com) · +31(0)6 11 78 54 69 · [LinkedIn](#) · [ORCID](#)



I am an enthusiastic student who is motivated by challenges. My main interest lies in innovation projects with a great societal impact towards the energy transition and climate. I love being on stage for public speaking or playing classical music on my beloved guitar. I enjoy riding my bike on long rides through nature and to challenge myself to ride up the biggest mountains I can find.

My mission is to become a world leading scientist whilst taking all the opportunities I can get to better the world we live in. Either doing it by mobilising young scientists to make an impact in the aviation industry, or by my own research activities in to renewable energy in the extreme -, and complex terrain, so that I will not be the last generation to enjoy my hobbies carefree.

## Working Experience

**NOVEMBER 2022 – 2026**

**PHD STUDENT IN RENEWABLE ENERGY IN CRYOSPHERIC ENVIRONMENTS**, École Polytechnique Fédérale de Lausanne

I am working on my PhD at the laboratory of Cryospheric Sciences (CRYOS) headed by prof. Michael Lehning, funded by the EPFL globaLeaders fellowship awarded by the European Commission to work on sustainable energy solutions on the three polar regions: (Ant-)arctic, and the high Alpine terrains. This fellowship allows me to work in parallel in secondment at the Meteorological Engineering Bureau MeteoTest, Bern.

**MARCH 2022 – DECEMBER 2022**

**YOUNG SCIENTIST**, Svalbard Integrated Arctic Earth Observing System

I was invited to publish a scientific meteorological article in the State of the Environmental Science in Svalbard. In this article we perform data analysis on several decades of temperature data from the ocean, the atmosphere and exosphere to find trends and correlations in Python, SQL and MATLAB. Article accepted, to be published.

**OCTOBER 2021 – PRESENT**

**CHAIRMAN**, Sustainable Aviation Youth Foundation

UN ICAO accredited, and supported youth organization with the goal of giving youth a voice in high level policy making. With my efforts in initiating this organization, Deputy Director of Sustainability at ICAO assigned me to lead the foundation process. I was elected in December 2022 as first chairman by the general assembly of the organisation.

**JANUARY 2021 – JUNE 2022**

**FOUNDER AND ADVISOR**, Falcon electric Aviation

**OCTOBER 2018 – JANUARY 2021**

**FOUNDER AND TEAM LEAD**, Falcon electric Aviation

Electric aircraft retrofit construction start-up. I worked on our demonstrator aircraft: Cessna 150. I was responsible for fundraising, and communications. [To start-up webpage](#)

## Education

**SEPTEMBER 2020 – JULY 2022**

**MSC SUSTAINABLE ENERGY TECHNOLOGY**, Eindhoven University of Technology

A multi-disciplinary MSc. degree, where I delivered my master thesis on thermo-chemical heat storage by material science experiments, CFD modelling with MATLAB and Python, and a business-related competitor analysis.

**Avg. grade: 8.1/10**

**APRIL 2021 – DECEMBER 2021**

**RESEARCH INTERN AT DEPARTMENT OF ARCTIC GEOPHYSICS**, The University Centre in Svalbard

My internship in collaboration with the Kjell Henriksen Observatory (N 78° E 16°) in Longyearbyen, Norway focused on experimenting with sustainable alternatives to weather balloons to perform Aurora Borealis observations above the cloud layer. I successfully provided sustainable data of the Northern Lights above Longyearbyen to the research group. [My report](#)

**Grade: 9.2/10**

**FEBRUARY 2020 – JUNE 2020**

**BACHELOR FINAL PROJECT**, Ares Analytics

Experimental research on diagnosing muscle fatigue for competitive cyclists using machine learning methods in Python and MATLAB.

**Grade: 8.8/10**

**SEPTEMBER 2017 – JUNE 2020**

**BSC APPLIED PHYSICS**, Eindhoven University of Technology

Electives in the fields of Energy, Engineering and Experimenting in multi-disciplinary teams

**Grade: 7.6/10**

**SEPTEMBER 2016 – JUNE 2017**

**PROPEDEUSE APLIED PHYSICS**, Fontys Hogescholen

I received my applied Sciences Propedeuse degree with high honours.

**Grade: 8.6/10**

# Volunteering and Activities

**MARCH 24<sup>th</sup> 2022**

**SPEAKER AND PANELIST**, Society of Automotive Engineers

Invited to speak about the future of sustainable aviation at the AeroTech Global event, soft-launching the Sustainable Aviation Youth foundation.

**OCTOBER 28<sup>th</sup> 2021**

**MODERATOR**, International Civil Aviation Organization (ICAO)

Invited to moderate the discussion session during the webinar on the Global Youth Engagement in Sustainable Aviation.

**MARCH 16<sup>th</sup> and AUGUST 31<sup>st</sup> 2021**

**SPEAKER**, International Civil Aviation Organization (ICAO)

Invited to speak at the UN ICAO stocktaking webinars, to talk about my view and projections on sustainable aviation innovations. [More info](#)

**JULY 2020 – OCTOBER 2020**

**FINALIST UNIVERSITY STARTUP WORLD CUP**, Falcon electric Aviation

I represented my start-up at the final in the university start-up world cup in Wenzhou, China

**JUNE 2020 – AUGUST 2020**

**BEST PITCH AWARDS AT THE EUROPEAN VENTURE PROGRAMME**, Falcon electric Aviation

A 2-week incubator programme collaborating with six Eurotech universities in Europe (DTU, TU/E, TUM, EPFL, Technion). I won both pitching competitions during the first and second week of the programme.

**SEPTEMBER 2014 – JULY 2016**

**CLASSICAL GUITAR PERFORMER**, Retirement homes near Helmond & Eindhoven

Perform classical guitar music for senior citizens, mentally- & terminally ill patients in retirement homes.

# Languages and Certificates

**DUTCH**, C2 – Native

**ENGLISH**, C2 – Non-native

**NORWEGIAN (BOKMÅL)**, A2/B1 – Conversational

**GERMAN**, A2/B1 – Conversational

**FRENCH**, A2 – Conversational (Basic)

**FEBRUARY 2022 – JULY 2022**

**FRENCH LEVEL A2**, École Polytechnique (L'X)

My interest to continue my studies in a French speaking region led me to improve my French.

**SEPTEMBER 2021**

**EASA CERTIFIED DRONE PILOT**, EASA

I have A0, A1 and A2 certificates for all 'Open'-category drone operations in EASA countries. I have flying experience with >4kg self-built fixed-wing drones in cryospheric conditions.

# Academic Grants, Prizes and Fellowships

**NOVEMBER 2022**

**€92.880**, EPFLglobal Leaders fellowship

Doctoral fellowship programme funding early-stage researchers to become leaders in the transition towards sustainable societies. Forty-eight doctoral fellows will benefit from a multifaceted training programme, including a secondment in the non-academic sector. [More info](#)

**OCTOBER 2018**

**€50.000**, Metropool Regio Eindhoven Research grant

Lead responsible for a research project on technical and economic feasibility of electric flying. [Overview \(Dutch\)](#)

**DECEMBER 2019**

**€20.000**, Province North-Brabant Innovation Fund

Lead responsible for a technical feasibility study for a 'run-up' test of an electrified Cessna 150 aircraft.

**JANUARY 2021**

**€17.000**, Eindhoven University of Technology

Lead responsible for a research grant for development of a Cessna-150 retro-fit towards electric propulsion.

**FEBRUARY 2022**

**€15.840**, Svalbard Integrated Arctic Earth Observation System

Collaborator as young scientist to publish in the fifth edition of the State of Environmental Sciences in Svalbard (SESS2022) journal. This project was led by the University of Bergen.

**AUGUST 2021**

**€2.000**, Netherlands Aerospace Centre

Solely responsible for a research grant for my internship at the University Centre in Svalbard to design, build and fly a fixed-wing drone for Aurora Borealis research in Longyearbyen, Norway, [More info \(p.3-4\)](#)

**SEPTEMBER 2021**

**€1.472**, ERASMUS+ Mobility

Mobility grant for my internship abroad.

**FEBRUARY 2021**

**€1.000**, Dutch Ministry of Infrastructure and Water Management

I presented the winning master plan for sustainable aviation in the Dutch Caribbean for the responsible minister. Receiving a €1.000 research prize.

**AUGUST 2020**

**€500**, EuroTech Alliance: European Venture Programme

I won both pitch competitions with 23 of the best start-up ideas from Eurotech universities. I participated on behalf of my start-up. [More info](#)

**NOVEMBER 2018**

**€250**, Golden Light Bulb Challenge

I won a research prize by presenting our start-up ideation to the Dutch Brainport, including representatives from Philips and ASML.