

# Luke Lloyd Longren

ADDRESS

PHONE

EMAIL

WEBSITE  
nocu.be

## Skills

LANGUAGES

**Native**  
English

**Conservant**  
German

PROGRAMMING

**Proficient**

Python, HTML/CSS/JS,  
Git, TeX

**Familiar**

C++, MATLAB, R

MACHINERY

Large Vehicles (**3 yrs.**)  
Fork Loaders (**1 yr.**)  
Pallet Carriers (**1 yr.**)

LICENSES

Driver (US, DE)  
Private Pilot (FAA)  
Amateur Radio (FCC)

FOCUS POINTS

Detail oriented  
Computer proficient  
Electronics experience  
Logistics knowledge  
Friendly & Mindful

updated:  
Oct. 2024

## Employment History

PHYSICAL SCIENTIST AUG. 2024 – PRESENT  
National Oceanic & Atmospheric Administration (NOAA) | Boulder, CO, USA

| Operates, calibrates, and maintains NOAA and partner climate instrumentation and projects. Part of the Observatory Operations team that collects data to monitor the composition of Earth's atmosphere and energy budget. Currently the alternate South Pole technician and scheduled to deploy to the South Pole station for 13 months in Oct. 2025.

OCEANOGRAPHIC DATA SPECIALIST JAN. 2024 – JUN. 2024  
Research Corporation of the University of Hawai'i | Honolulu, HI, USA

| Supports, maintains, and develops acquisition and processing software and installation procedures. Trains technicians and scientists on using acquisition software and processing Acoustic Doppler Current Profiler (ADCP) data. Manages, installs, maintains, supports, and upgrades shipboard ADCP data systems on UNOLS, NOAA, and foreign research ships.

RESEARCH ASSOCIATE FEB. 2023 – NOV. 2023  
Leidos | McMurdo Station, Antarctica

| Supported a variety of scientific research projects in the physical and astrophysical sciences over the austral winter at McMurdo Station. Duties included working with advanced scientific instrumentation, assisting in data collection, and carrying out research protocols for National Science Foundation (NSF) grantees and other groups (e.g., military, NOAA).

AIR TRANSPORTATION SPECIALIST OCT. 2022 – FEB. 2023  
Amentum/PAE | McMurdo Station, Antarctica

| Handled cargo in Antarctica for the austral summer. The position involved movement of all supplies in and out of the station via aircraft, most of which were military. Responsibilities included the quality control of every aspect in cargo and supply handling, ensuring tasking was carried out safely and efficiently, and operation of large equipment on snow and ice.

VISITING SCHOLAR JUL. 2021 – SEP. 2022  
Humboldt University of Berlin | Berlin, BE, DE

| Investigated neuromusculature in the elephant during and after my MSc thesis as a guest researcher. Initially explored automatic segmentation of individual elephant trunk muscles, later leading three other students in manual tracing the musculature. Analyzed the reconstruction to provide insight into the relationship between elephant trunk and brain.

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## Education

MSC, COMPUTATIONAL NEUROSCIENCE OCT. 2019 – MAR. 2022  
Technical University of Berlin | Berlin, BE, DE

| Bernstein Center for Computational Neuroscience  
Thesis: Automatic Segmentation of Elephant Trunk Muscles

BSc, PHYSICS AUG. 2015 – MAY 2019  
Fort Hays State University | Hays, KS, USA

| Kansas Academy of Mathematics and Science ('15-'17)  
Minor, Mathematics

## Publications

- [1] **L. Longren** & L. Eigen *et al.*, "Dense reconstruction of elephant trunk musculature", *Current Biology*, vol. 33, no. 21 (2023).
- [2] I. Rebollo, M. Schmidt, **L. Longren**, and S. Park, "Influence of visual food cues on autonomic activity and craving", *Biological Psychology*, vol. 165, p. 108197 (2021).