WILLIAM NASH

(413)-539-3599 \diamond email: wnash@bu.edu \diamond website: wnash.me

WORK EXPERIENCE

Chloris Geospatial Senior Software Engineer under Jarrod Lewis (jarrod@chloris.earth)	March 2023 - Present Boston, MA
 Indepedently developed and implemented error propagation methodology Transcribed published earth science algorithms into scalable, performant of 	used for biomass estimation code
Chloris Geospatial Data Engineer under Jarrod Lewis (jarrod@chloris.earth)	May 2022 - March 2023 Boston, MA
 Developed and maintained software for estimating biomass from multiple Independently rewrote changepoint detection algorithm and reduced process savings of > 50x Reduced processing time of image processing pipeline by roughly 70% 	TB of satellite images cessing time by $> 95\%$, resulting in a
UCLA Physics Department / CERN PhD Student and Postdoc under Jay Hauser (hauser@physics.ucla.edu)	July 2016 - March 2022 Los Angeles, CA
 Conducted petabyte-scale data analysis utilizing LHC data and Monte Ca Devised mathematical techniques used for evaluation of systematic uncert Developed pattern recognition algorithm improving muon position resolut 	rlo simulation ainties ion by a factor of two
Mevion Medical Systems Software Engineer I: Physics and Algorithms	September 2015 - July 2016 Littleton, MA
 Designed and wrote data acquisition, data analysis and control system sof Individually devised algorithms used for real-time position modulation of Created GEANT4 batch farm using Amazon Web Services (AWS) 	čtware proton beams
EDUCATION	
UCLA PhD in Physics	March 2022
Boston University BA in Physics (cum laude)	May 2014
Member of Sigma Alpha Mu	
TECHNICAL STRENGTHS	

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Computer Languages	Python, C/C++, Unix, Markdown, LaTeX, CSS, R, Java
Packages	dask, numpy, git (w/ CI), xarray, matplotlib, pandas, docker,
	numba, tensorflow, sklearn
Skills	Data analysis, machine learning, AWS, statistics, REST APIs
CTIVITIES	

ACTIVITIES

Volunteering CERN Open Days 2019, Explore Your Universe 2018, 2017

PUBLICATIONS

The CMS collaboration, "Search for long-lived particles decaying to a pair of muons in proton-proton collisions at $\sqrt{s} = 13$ TeV", 10.1007/JHEP05(2023)228

W. Nash, C. Grefe, "Beam Profiling through Wire Chamber Tracking", LCD-Note-2013-009, 2013

CERTIFICATIONS

AWS Machine Learning Specialty, October 8, 2023