John Wong

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Experience

Software Engineer at The Weather Company, an IBM Business 2014 – now
Contributed substantially to the development of an iPad app. Handled logistics and directly interfaced with beta testers. Acted as SME on topics in aviation and meteorology when needed.

Founder and Developer at Metfolio, LLC 2013 – 2014
A start-up founded on the idea of discovering direct values in professional weather products by consumers.

Education

University of Colorado at Boulder 2008 – 2013
Ph.D., M.S. Atmospheric and Oceanic Sciences

University of Arkansas, Fayetteville 2003 – 2007
M.A., B.S. Physics (Computational); B.S. *magna cum laude* Mathematics (Applied)

Technical skills

Techniques: Statistical analysis, machine learning, heuristic optimization, heterogenous arch.
Languages: Python, Objective-C, Swift, C/C++, Java, Fortran, Javascript, *NIX scripting
Frameworks and libraries: OpenCL, MPI, OpenMP, SciPy, Scikit-learn
IDEs and tools: vi(m), Xcode, Instruments, Eclipse; Git; IDL, Matlab, Octave
Data and DBs: NetCDF, HDF5, GTFS; SQLs, exposure to MongoDB, Cassandra
Miscelleneous: LaTeX; exposure to Hadoop/YARN, AWS; Aviation (student pilot, $\sim$ 60 hours)

Selected Projects

WSI Pilotbrief Optima for the iPad 2014 – now
The leading aviation weather app deployed in commercial aviation.

Nested Regional Climate Model 2012
Assisting in the development of a next-generation climate & chemistry model.

Lightning parameterization at the convective scale 2010
Implementing scale-aware lightning parameterization for weather models.

Chemical kinetics with OpenCL (class project) 2010
Implemented a Rosenbrock chemistry model with OpenCL across architectures.

Transport of chemicals assessed with models and satellite observation 2008
A collaboration between scientists from NCAR, CU, NOAA, & NASA JPL.

Sourcecode contributions

Refactoring of lightning NOx driver — *NCAR's WRF-Chem v3.5* 2013
Refactoring old implementation and mediating collaborated contributions.

Lightning NOx emission parameterization — *NCAR's WRF-Chem v3.4* 2011
Implemented lightning NOx emission option for convective-scale simulations.

Online tendency diagnostics — *NCAR's WRF-Chem v3.2* 2009
Developed module for decoupling tendency diagnostics for chemical species.

Full C.V. and resume available through `https://github.com/anotherjohnwong/Resume`