

# Matthew A Sochor, PhD

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🌐 <https://github.com/matthew-sochor>

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## SKILLS

**Languages:** Python, R, SQL, Java

**Big Data Technologies:** Docker, Kubernetes, Hadoop, Spark, Hive, Pig

## EDUCATION

**University of Pennsylvania**, Philadelphia, PA  
PhD in Biochemistry and Molecular Biophysics

Jun 2008 – Mar 2014

**Cornell University**, Ithaca, NY  
BS in Applied and Engineering Physics

Sep 2002 – Jun 2006

## EXPERIENCE

**Progressive Insurance**

Sep 2016 – Present

*Lead Data Scientist*

Algorithm development for usage based insurance (Snapshot) program to use mobile and on-board telematics data to predict individual driver risk.

**Mobile Defense**

Aug 2015 – Sep 2016

*Data Scientist*

Built machine learning models to predict battery decay and mobile app resource usage for a mobile app, Pocket Geek.

**The Data Incubator**

Mar 2015 – May 2015

*Data Scientist Fellow*

Selected from over a thousand applicants to participate in a rigorous two month data science fellowship program.

**Center for Retinal and Ocular Therapy**

Mar 2014 – Aug 2014

*Post-Doctoral Researcher, University of Pennsylvania*

Applied PhD work to regulate GFP in mouse retina using oral delivery of a sugar.

**Lewis Laboratory**

Mar 2009 – Mar 2014

*Graduate Student, University of Pennsylvania*

Modeled mutants of the lac repressor from *E. coli* and re-wired to build a self-regulating gene delivery system for ocular gene therapy.

## PUBLIC

## PROJECTS

**What Is My Fish:**

<https://www.whatismyfish.net>

Finalist for Erie Hack, a multi-city hackathon to build projects to help Lake Erie. Classifies commonly caught fish species from a photograph and provides anglers with basic information regarding invasive or native status.

**Pokémon Go, Your Battery, and You:**

<https://www.mobileddefense.com/blog/2016/07/28/pokemon-your-phone-and-you/>

Blog post to show how Pokémon Go utilizes your phone's resources compared with other popular phone apps.