

# Aleks Navratil

AleksNavratil.com  
avn2109@columbia.edu

*Data Scientist, PhD dropout, guy who solves problems*

*Immigration Status: US Citizen*

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## Education

Dropped Out **PhD Mechanical Engineering**, *Columbia University*.  
Got a MS before leaving. Research focus: Graphene materials for aerospace

Awarded **Mathematics/Mechanical Engineering**, *Columbia University*.  
2012 Double major in Math and Engineering

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## Real Jobs

'14— **Data Scientist**, *Collective Media*, NYC.

Ongoing

- Ad-tech data science in midtown Manhattan
- Modeling, prediction, analytics and more in R, Python, SQL, and on Hadoop

'11—'14 **Data Engineer/Grad Student**, *Energy and Tribology Lab*, Columbia University.

- Python/Pandas/NumPy/Matplotlib on Ubuntu for computational research in graphene
- Led a team of 3 engineers to the fastest provisional patent in Lab history (18 weeks)

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## Internships

Summer '12 **Data Analytics Engineer—Graduate Intern**, *Tyco Electronics*, Hershey, PA.

Summer '11 **Database Manager—Intern**, *Traylor Heavy Civil, Underground Division*, NYC.

S. '09 & '10 **Computational Materials—Intern**, *Argonne National Lab*, Chicago.

Summer '08 **Quant Marketing—Intern**, *PrintingForLess.com*, Livingston, Montana.

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## Skills

R Intermediate: 2 years experience in industry. Lots of glmnet, plyr, and ggplot

Python Intermediate: 2 years experience in 2.7, mostly with Pandas; some Django

Hadoop 1 year experience with Hive, Oozie, Impala, and more

SQL 2 years experience with Postgres, Netezza, Hive, and Impala

Java & C++ Beginner: 1 semester experience each

Mathematica Intermediate: 2 years experience. Mostly scientific work

Git 2 years experience

ML Mostly in R with glmnet, some scikit-learn

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## Achievements & Awards

April 2013 **NSF Graduate Research Fellowship**: Honorable Mention

Feb. 2013 **US Provisional Patent**: Lightweight carbon composite material for aerospace

2010 & 2011 **R. Simperman Endowed Scholarship**: 2-year consecutive winner (A competitive scholarship for undergraduates in Mathematics and the Sciences)

2009 & 2010 **MCM International Mathematical Contest**: 2-year consecutive Meritorious Winner (an international mathematical contest with thousands of entrants)

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## Personal

CU Ski Team Team qualified for USCSA Nationals in '12 and '13 in slalom and giant slalom

Interests Squash, Basketball, Thai food, typography & design

Spanish Conversational. Spent a summer in Madrid