Aleks Navratil

Data Scientist, PhD dropout, guy who solves problems

AleksNavratil.com avn2109@columbia.edu Immigration Status: US Citizen

Education

Dropped Out PhD Mechanical Engineering, Columbia University.

Got a MS before leaving. Research focus: Nanoscale carbon materials for aerospace

Awarded Mathematics/Mechanical Engineering, Columbia University.

2012 Double major in Math and Engineering

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)

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.

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

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)

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