

2020 Proximity Drive, Apt. 1121
Charleston, South Carolina
29414, USA

+1 (787) 550-8328
nel.abdiel@gmail.com
<http://www.nelabdiel.com>

EDUCATION	<p>University of Iowa, Iowa City, Iowa Ph.D. in Mathematics May 2016 M.S. in Mathematics Dec 2014</p> <p>University of Northern Iowa, Cedar Falls, Iowa M.A. in Mathematics Jul 2010</p> <p>University of Puerto Rico, Rio Piedras Campus, San Juan, Puerto Rico B.S. in Mathematics May 2009</p>
CERTIFICATE	<p>The Data Incubator, Washington, D.C. Certificate in Data Science Feb 2016 Fellow. <i>Selected among the less than 4% of +1900 applicants.</i></p>
SKILLS	<ul style="list-style-type: none"> • Stack: Python, D3.js, Hadoop, Cassandra, HAWQ, Greenplum. • Knowledge of: Machine Learning, Natural Language Processing, Data Visualization, Web Scraping. • Tools: Git, Pandas, NumPy/SciPy, Scikit-Learn, NLTK, Flask/Django, Bokeh, HTML5/CSS3, Carto. • Familiar with: SQLite, CockroachDB, MongoDB, MapReduce, Spark/Scala, R, Go, JavaScript, C++. • Dominance of: English and Spanish.
EXPERIENCE	<p>Soteria - Security Consulting & Data Analytics, Charleston, S.C. Data Scientist - Python Developer (Short Term Contract) Jun 2016–Present</p> <ul style="list-style-type: none"> • Created Python software for extraction and classification of features from unstructured data from +30000 websites a day. Both structured and unstructured data is then automatically saved into a Cassandra database. • Devised Python pipeline to automate the scoring of +30000 websites received per day. • Developed predictive model using a Gradient Boosting Classifier to automate the detection of cyber threats with a 98% accuracy. • Built a web application for internal use using Python, Flask, Django, HTML5/CSS3, and D3.js, that allows users to interact with data in a more visual matter. • Contributed to the improvement of an already existing solution by boosting predictive model performance and adding new features to web application. • Was involved in the decision making of the technologies to be implemented for ETL. <p>The Data Incubator, Washington, D.C. Fellow Jan 2016–Feb 2016</p> <p>Selected Projects:</p> <ul style="list-style-type: none"> • Capstone: http://iokilos.herokuapp.com. Scraped over a thousand pages from various websites to collect data. Conducted a thorough analysis of the distribution of world records in Weightlifting. Developed an app for strength athletes' training cycles using Clustering Algorithms. • Conducted open-ended analysis of user behaviors on +9GB of StackOverFlow data using Scala and Spark. • Performed Natural Language Processing analysis on Yelp's academic dataset, +325MB of json data. <p>Mathematics Department, University of Iowa. Instructor and Teaching Assistant Aug 2011 – Dec 2015</p> <ul style="list-style-type: none"> • Taught a variety of college courses (25 to +100 students), from Precalculus to graduate courses in Topology.
SELECTED PUBLICATIONS & AWARDS	<p>The Localized Skein Algebra Is Frobenius Jan 2016 N. Abdiel and C. Frohman, in <i>Journal of Knot Theory And Its Ramifications</i></p> <p>Ballard-Seashore Fellowship, University of Iowa Jan 2016 – May 2016 Awarded for outstanding contributions to the field of Topological Quantum Field Theory.</p>