Alan Polyak

Working at the Crossroads of Data Science, Product, and UX for Positive Social Impact

A passionate team leader, data scientist, developer, and designer interested in creating a meaningful impact on the world through artificial intelligence, data visualization, information ethics, and novel technologies. I am a graduate student at Cornell University, combining my studies of data science and management with social and visual design.

Education

05/2020

Cornell University
Master in Operations Research and Information Engineering
Concentrations in Machine Learning and Technical Management

05/2019

Cornell University
Bachelor in Statistics and Computing & Information Science | *3.6 GPA*
Concentrations in Data Science and User Experience
Minors in Applied Economics and Business

Work Experience

05/2018 - 08/2018

Data Scientist Intern - Data Products
VISA | San Francisco Bay Area
- Built an original natural language processing algorithm for fuzzy matching, which resulted in $6MM added value through product data enrichment.
- Implemented probabilistic classifier machine learning models for payment service provider categorization in transaction data.
- Utilized survival analysis and time series for predictive product analytics.

08/2017 - 05/2018

Head of UX and Front-End Engineering
Cornell Web Development | Ithaca, NY
- Conducted UX research with a data-driven approach to better understand user preferences through web data analytics and A/B testing.
- Managed a team of developers from project conception to deployment using the agile software development framework and numerous iterations.
- Administered and taught public classes on JavaScript and web design.

08/2017 - 12/2017

Data Analyst
Elephant Listening Project | Cornell Lab of Ornithology | Ithaca, NY
- Saved a total of 4 endangered African elephants from poachers with AI.
- Tracked elephants in real-time with signal processing.
- Helped create a machine learning classifier on live incoming soundwaves.

Projects and Accomplishments

09/2018 - 01/2019

Machine Learning Engineer - Currents iOS App
Cornell University Sustainable Design (CUSD) | Ithaca, NY
- Assisted in the creation of a mobile application focusing on sustainability by using machine learning models from intelligent sensors and wearables to automatically learn user's HVAC system usage and room occupancy.
- Applying computer science and electrical engineering, we have developed a system that offers substantial energy savings.

07/2018

Finalist - Global Hackathon 2018
VISA | San Francisco Bay Area
- Pioneered a novel approach to fraud detection that incorporates layers of deep learning systems to reduce false positives and chargebacks, saving companies $Billions yearly within the payments industry.
- Obtained patent pending status for this detection methodology.

Personal Info

Contact
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LinkedIn
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Relevant Coursework

Multivariable Calculus and Linear Algebra

Advanced Statistical Modeling

Statistical Computing and Simulation

Data Structures and Algorithms

Machine Learning for Data Science

Statistical Data Mining and Time Series

Big Data Management and Analysis

Probability and Statistics Theory

Optimization and Operations Research

Stochastic Processes and Modeling

Interactive Data Visualization

Technical Product Management

Technology Design for Social Impact

Web Programming and Design

Micro and Macro Economic Theory

Finance | Marketing | Accounting

Languages

Russian | Ukrainian
⬤⬤⬤⬤⬤ Native

Spanish | Polish
⬤⬤⬤⬤◯ Advanced

Chinese
⬤⬤◯◯◯ Basic

Technical Skills

Python | Java | Scala | MATLAB | VBA

R | SQL | Hive | GIS | Tableau | D3.js

Hadoop | Spark | MapReduce | Pig

JavaScript | PHP | CSS | HTML | jQuery

NLP | Data Mining | Machine Learning

Photoshop | InDesign | Illustrator | Sketch

Agile Development | Microsoft Office Suite

Personal Interests

Photography | Borscht | Samoyeds

Activism | Kombucha | Probiotics