# Andrei Kozyrev

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## Education

### Cornell University

**M.S., Computer Science with a minor in Applied Math (May 2022)**

Very small, fully-funded and research focused M.S. program. 1 of 11 admitted students.
Research statement: Designing robust learning algorithms for making decisions under uncertainty and analyzing their impact on people and other systems. Areas: Reinforcement Learning, Meta Learning, robustness and interpretability

**B.A., Computer and Information Science (May 2020)**

Relevant courses: Introduction to Analysis of Algorithms, Machine Learning, Functional Programming, NLP, Computer Vision, Information Retrieval, Discrete Structures, Introduction to Data Science, Data Structures

## Work Experience

**Incoming Software Engineer Intern,** *Uber* — October 2020 - Present | San Francisco, CA
- SWE Intern for summer 2021; Team TBD

**Graduate Researcher,** *Cornell University* — September 2020 - Present | Ithaca, NY
- Researched algorithms for strategic classification and performative prediction, advised by Professor Robert Kleinberg

**Graduate Teaching Assistant,** *Cornell University* — August 2020 - Present | Ithaca, NY
- Graduate TA for CS 4740: Natural Language Processing (NLP)

**Machine Learning Engineer (Intern & Part-time),** *All Vision Intelligence* — February 2020 - Present | Remote
- Built ML models and infrastructure/APIs for a real-time decision making product; tech stack: Python, OpenCV, React, Docker
- Spent time on product management, operations and communicating with clients to help our early-stage team (5 people)
- Received full-time offer to become the 1st machine learning engineer at the company

**Undergraduate Machine Learning Researcher,** *Cornell University* — August 2019 - May 2020 | Ithaca, NY
- Designed a fair machine learning approach to college admissions in collaboration with Cornell's College of Engineering
- Researched fairness guarantees for ML in ranking and recommender systems with Prof. Thorsten Joachims

**Software Engineering Intern,** *Capital One* — June 2019 – August 2019 | McLean, VA
- Designed and built an end-to-end machine learning model for predicting optimal credit card limit increases using Python (XGBoost/PyTorch/Sklearn), PySpark, and AWS; Model informs decisions for a program with $1.8 billion in exposure
- Worked with product and data science teams to productionize ML workflows and develop a new credit utilization metric

**Teaching Assistant,** *Cornell University* — August 2018 - December 2019 | Ithaca, NY
- CS 3110: Functional Programming and Data Structures (Fall 2019); CS 1300: Intro Design & Web Dev (Fall 2018)

**Software Engineering Intern,** *Radius Networks (FlyBuy)* — June 2018 - August 2018 | Washington, D.C.
- Learned and used Go to build a data pipeline and API from scratch; open-sourced part of my work on GitHub
- Developed a frontend feature and integrated with the pipeline; deployed in an update to over 12,000 McDonald's locations

## Projects

### Open-source Machine Learning Package
- Built the first open-source Linear Discriminant Analysis package in Go: github.com/RadiusNetworks/lda

*Legal Pro Tips:* **Legal Search Engine** — https://legal-pro-tips-final.herokuapp.com/
- Worked in a team of 5 to build a web app for COVID-related legal issues using Flask, sklearn/numpy, and JavaScript (React)
- Implemented Information Retrieval and Learning-to-Rank algorithms such as relevance feedback, TF-IDF and others

## Leadership

**Engineering Lead,** *Ezra Box*
- Used Flask, React, Redis, PostgreSQL, and AWS to build a full-stack web app for a summer-storage startup (ezrabox.com)
- Led and mentored a team of 4 engineers; introduced code reviews and test-driven development
- Under my leadership our team received Disney's *best engineering team award* at Cornell's annual engineering showcase

## Skills

**Programming:** Python, Go, Java, C++, JavaScript, OCaml

**Tools & Frameworks:** PySpark, PyTorch, TensorFlow, Scikit-learn, Flask, React, PostgreSQL, AWS