

# Ethan Roland

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## Education

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### Georgia Institute of Technology - Atlanta, GA

*B.S. Computer Science & Chinese Minor*

- **Honors:** Magna Cum Laude
- **Extracurriculars:** AI Club, Weightlifting Club, WREK Radio Club, Effective Altruism Club
- **Relevant Coursework:** Machine Learning, Agile Methodologies, Databases, Data Structures & Algorithms, NLP

### Shanghai Jiaotong University - Shanghai, China

*Chinese Language Immersion Program, Short Course*

## Skills

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- Strong communication skills that emphasize business impact while maintaining technical rigor
- More than 6 years experience in Python, Java, C, C++, and JavaScript
- Proficiency in cloud computing platforms including AWS, Azure, and Google Cloud APIs
- Expertise in machine learning tools & platforms including SciPy, PyTorch, TensorFlow, JAX, NumPy, and Pandas
- Background in both traditional statistical analysis and neural network based approaches like Transformers and CNNs
- Frontend development experience using HTML, NodeJS, CSS, Typescript, React, Styled-Components, MongoDB, and SQL

## Experience

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### AGCO Corporation, Atlanta, GA

*Data Scientist, Aug 2021 - Present*

- Overhauled global industry demand forecasting methodology using custom built time series forecasting models
- Improved combine harvester grain yields by developing new algorithms for the optimization of combine settings
- Worked alongside agronomists to develop new soil sampling methodologies to maximize farm revenues while minimizing costs

*Data Analyst, Jun 2021 - Aug 2021*

- Alleviated supply chain constraints by using ML techniques to analyze unstructured text data, enabling supplier optimization

*Analytics Intern, Jun 2020 - Jun 2021*

- Enabled more than \$20 million in potential savings by helping to automate the identification of manufacturing redundancies

### Phonology Laboratory, Atlanta, GA

*Research Assistant, Mar 2020 - Jun 2021*

- Developed neural models for speech recognition that operate within the browser to assist with foreign language education

### Contextual Computing Group, Atlanta, GA

*Research Assistant, Sept 2019 - Mar 2020*

- Applied signal processing techniques to fMRI data to enable the development of state of the art brain-computer interfaces

### Atlanta Tech Village, Atlanta, GA

*Software Development Intern, May 2017 - Aug 2017*

- Performed full stack web-app development using tools like Node & Angular JS, deployed to cloud service providers

## Projects

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### Capital One @ GT - Student Team Leader

*Capstone Design project to develop a web application for Capital One employees*

- Used Agile principles to lead a team of six students throughout a two semester web design project for Capital One

### Fake News Detector - Term Project

*Applied NLP tools to automatically detect healthcare related fake news*

- Used NLP techniques to detect if a given social media post contained fake news, including TF-IDF and text classification models