

Ethan Roland

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Education

Georgia Institute of Technology - Atlanta, GA

B.S. Computer Science & Chinese Minor (May 2021)

- **Honors:** Honor's Program
- **Extracurriculars:** AI Club, Weightlifting Club, WREK Radio Club
- **Relevant Coursework:** Machine Learning, Agile Methodologies, Databases, Data Structures & Algorithms, Natural Language

Shanghai Jiaotong University - Shanghai, China

Chinese Language Immersion Program (Summer 2019)

Skills

- More than 5 years experience in Python, Java, C, C++, and Javascript
- Proficiency in cloud computing platforms including AWS, Heroku, and Google Cloud APIs
- Expertise in machine learning tools including SciPy, TensorFlow, Julia, Numpy, MS Excel, and Tableau
- Web development experience using HTML, NodeJS, CSS, Typescript, React, Styled-Components, MongoDB, and SQL

Experience

AGCO Corporation, Atlanta, GA

Data Analytics Intern, Jun 2020 - Present

- Apply machine learning and data modeling techniques to **unstructured text data** to create automated solutions for extracting attribute information from technical documents, using tools like random forest classification and TF-IDF
- Follow **full-stack approach to data science**, creating a pipeline that includes data mining, model creation, accuracy assessment, deployment, maintenance, user interaction, and impact analysis
- Enable more than **\$20 million** in potential savings by helping to identify redundancies and increase economies of scale

Phonology Laboratory, Atlanta, GA

Linguistics Research Assistant, Mar 2020 - Present

- Develop **speech recognition tools** to enable the analysis and visualization of the speech quality of ESL students
- Create reactive web interfaces using **modern web development** tools like React, Typescript, and Styled-Components

Contextual Computing Group, Atlanta, GA

Accessibility Research Assistant, Sept 2019 - Mar 2020

- Apply **signal processing** techniques to fMRI data to enable the development of state of the art **brain-computer interfaces**
- Develop **experimental procedures** following proper safety and ethical guidelines

Atlanta Tech Village, Atlanta, GA

Startup Engineering Intern, May 2017 - Aug 2017

- Oversee the **agile development** of websites using NodeJS, MongoDB, and other web development tools
- Deploy web services to **cloud service providers** like Heroku and ensure functionality at large scales

Projects

Capital One @ GT - Student Team Leader

GT Junior Design project to develop a web application for Capital One employees to learn about their area

- Lead team of six students during two semester project for Capital One through the Georgia Tech Junior Design program
- Enable the clear communication of client expectations, facilitating team organization according to Agile principles

Covid Fake News Detector

Applied NLP tools to automatically detect healthcare related fake news

- Use TF-IDF vectors to train a binary text classifier to detect if a given social media post contains fake news