

Ethan Roland

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EDUCATION

GEORGIA INSTITUTE OF TECHNOLOGY

Atlanta, GA

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

- **Honors:** Honor's Program
- **Extracurriculars:** AI Club, Weightlifting Team, WREK Radio Club
- **Relevant Coursework:** Machine Learning, Agile Methodologies, Database Management, Data Structures and Algorithms

SHANGHAI JIAOTONG UNIVERSITY

Shanghai, China

Chinese Language Immersion Program (Summer 2019)

SKILLS & ABILITIES

- More than 5 years experience in Python, Java, C, C++, and Javascript
- Proficiency in cloud computing platforms, including Microsoft Azure, AWS, and Google Cloud APIs
- Expertise in machine learning tools, including SciPy, PyTorch, Tensorflow, Julia, Numpy, MS Excel, and Tableau
- Web development experience using HTML, NodeJS, CSS, AngularJS, MongoDB, and SQL
- Conversational fluency in Mandarin Chinese

WORK EXPERIENCE

AGCO CORPORATION, Atlanta, GA

Research and Development Intern, June 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, and impact analysis
- Enable more than **\$20 million** in potential savings by helping to identify parts 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
- Implement principles of **user interface design** to ensure easy understanding of complex technical information

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

THE WHATEVER NETWORK, Atlanta, GA

Engineering Intern, May 2017 - Aug 2017

- Oversee the **agile development** of websites using NodeJS, Angular JS, and other templating languages
- Deploy web services to **cloud service providers** like Heroku and AWS and ensure functionality at large scales

TECHNICAL PROJECTS

CAPITAL ONE PROJECT LEAD

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

- Led team of six developers during a two semester project for Capital One through the Georgia Tech Junior Design program
- Enabled the clear communication of client expectations, and facilitated internal team organization according to Agile principles

COVID FAKE NEWS DETECTOR

Applied NLP tools to automatically detect healthcare related fake news

- Used Word2Vec embedding vectors to train a text classifier to detect if a given social media post contained fake news