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, 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 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
Startup 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

OTHER PROJECTS

CAPITAL ONE @ GT - STUDENT TEAM LEADER
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 Word2Vect embedding vectors to train a text classifier to detect if a given social media post contained fake news