# CONOR STUART-ROE

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| | |
|---|---|
| natural languages: | English native • Mandarin HSK4 • Dutch B1 |
| computer languages: | Python • Java • JS/jQuery • HTML • CSS/Bootstrap • PHP • various XML (TEI, XSLT, SSML) |
| other technologies: | NLTK • NumPy • pandas • DigitalOcean • Heroku • Django • TensorFlow • Git • Excel |

## TECHNICAL STRENGTHS

**Python Development**

*I have very extensive professional experience with Python, using it to build backend web architecture, corpus management software, and artificial intelligence algorithms. I am closely familiar with NLP and analysis libraries such as NumPy, pandas, TensorFlow, and NLTK.*

**Mathematical Modeling and Deep Learning**

*A firm grounding in linear algebra, statistics, and discrete math, and practical experience using it in applications such as latent semantic analysis, principal component analysis, entropy modeling, language modeling, RSA encryption, and neural network architecture.*

**Natural Language Analysis and Processing**

*I have award-winning technical skills in formal linguistic analysis, and experience applying in contexts as diverse as descriptive linguistics research, corpus management, and deep learning language modeling.*

**Full Stack Web Development**

*I have built websites from both a higher level through WordPress as well as backend architecture with Django, AWS, DigitalOcean, Heroku, SQLite.*

## EXPERIENCE

**Full Stack Developer for Ticha** at Haverford Digital Scholarship          Philadelphia, PA          Jan 2017-present

*Ticha is an online dictionary and primary source database for the Zapotec language, built with Django on a Droplet. In collaboration with student researchers, I've built new features such as TEI parsers, reader interfaces, and automated PDF generation, using a combination of Python and front-end web tools.*

**Artificial Intelligence Developer** at Ivy.ai          Durham, NC          Jun-Aug 2017

*For Ivy's chatbot service, I conducted research and testing of natural language understanding software capable of reading the web to build a semi-unstructured ontology and answer questions from students and other university website visitors. I also created a new company site from scratch in three weeks with WordPress.*

**Feature Writer and Quantitative Analytics Developer** at Dynalect Analytics          Jan-Jul 2017

*For a finance blog that I co-created, I built a professional and responsive site with WordPress, wrote weekly pieces and monthly long-form industry analyses, and created predictive machine learning models of financial markets.*

**Creator and teacher** of three linguistics seminars at NCSSM          Durham, NC          2014-2015
**Teaching Assistant** for Mandarin and mathematics at NCSSM

## EDUCATION

**Haverford College,** B.S. & B.A.          Philadelphia, PA          2016-2020
    GPA: 3.95
    degrees in progress: Linguistics, Computer Science

**North Carolina School of Science and Mathematics,** high school          Durham, NC          2013-2015
    Weighted GPA: 5.37
    Composite SAT: 2390

## AWARDS AND RECOGNITIONS

**Silver Medalist, International Olympiad in Linguistics**          Blagoevgrad, Bulgaria          Jul 2015

*I performed second among over 3000 North American competitors to qualify. My team received first prize at IOL.*