



Curtis Bowman

Back-End Developer

Back-End Engineer with hands-on experience in all levels of the software development life-cycle. Passionate about building scalable and extensible systems through functional programming principles. Proven ability to learn new technologies and concepts, communicate complex ideas clearly, and adapt quickly to changing requirements. Self-motivated and willing to take ownership of a project, keeping it moving forward with minimal oversight.

Skills

Functional Programming

Capable of programming in a functional style in both functional and non-functional languages

Natural Language Processing

Track record of using NLP techniques to provide measurable results that enhance user experience.

Problem Solving

Proven ability to provide solutions to complex problems while learning new concepts and technologies on the job.

Technologies

- Clojure
- ClojureScript
- Python
- Emacs-Lisp

- NLTK
- Scikit-Learn
- Flask
- Reagent

- Linux
- Git
- Docker
- Vagrant

Experience

Apr–Dec 2015 **Data Science Contractor**, SHOEBOXED, Durham, NC.

- Designed and implemented a named entity recognition pipeline capable of tagging vendor names, product descriptions, and prices in receipt documents with an F1-score greater than 0.97.
- Developed an internal tool using Python, Flask, and AngularJS that allowed non-technical employees to tag product, price, and vendor entities in receipt documents at an average rate of over 200 documents per hour. Using this tool we were able to create a corpus of 10,000 documents to train supervised learning models on.

May–Oct, 2012 **Machine Learning Intern**, SHOEBOXED, Durham, NC.

- Developed a proof of concept named entity recognition model capable of extracting product descriptions from email receipts with an F1 score greater than 0.93.
- Trained a prototype classification model capable of identifying email receipts in a users inbox. Following my internship, this classifier would be adapted for use in a Gmail plugin allowing users to have their email receipts automatically imported into their account.
- Designed and Deployed an internal API using Python, Flask, and deployed on Heroku that allowed anyone in the company to test various machine learning models on their personal receipts. This provided user feedback that was crucial in developing models that would provide the most value to our customers.

Education

2008–2012, 2015 **University of North Carolina, Chapel Hill**, *Computer Science & Philosophy*.
— **President, UNC Philosophy Club** 2010–2011