

Jacob Beauchamp

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Bloomington, IN • <https://github.com/jake17007>

EDUCATION

Indiana University, Bloomington, IN – GPA: 3.8

Bachelor of Science in Computer Science, Mathematics Minor – Expected December 2018

Awards: Cox Legacy Scholarship (full-ride)

Selected Coursework: Data Structures (Java), Design and Analysis of Algorithms (Java), Machine Learning (Python), Database Concepts, Network Security, C and Unix, Data Mining, Linear Algebra, Probability and Statistics

EXPERIENCE

Big Data and Machine Learning Support and Documentation Specialist

August 2017 – Present

Indiana University Research Analytics – Bloomington, IN

- Tested functionality and benchmarks for Hadoop and Spark installations on two university HPC clusters
- Wrote Hadoop and Spark documentation for use by university HPC and analytics researchers

Computer Vision Research Assistant

August 2016 – May 2017

Indiana University Computer Vision Lab – Bloomington, IN

- Researched and implemented a deep convolutional neural network to count cars and empty spaces in parking lots achieving 64% and 84% accuracy, respectively (TensorFlow, Keras, GPU Cloud Computing, Linux)
- Participated and presented a poster at the Naval Engineering Education Consortium (NEEC) conference

Software Developer Intern

January 2016 – Present

VSolvit – Ventura, CA (working remotely)

- As Technical Lead, developed an employee database and web application to manage over 150 VSolvit Solutions Center employees (Oracle SQL, Oracle APEX, JavaScript)
- Implemented back-end testing/maintenance on a US Navy legacy web application on an Agile team with senior software engineers, modernizing it to current standards (Classic ASP, JetBrains YouTrack)

Database Analyst Intern

May 2016 – August 2016

Harmony Healthcare IT – South Bend, IN

- Executed ETL services on healthcare data, porting legacy systems data to a cloud-based archive application in compliance with HIPAA regulations regarding PHI; completed 3 systems saving each company thousands in support/licensing costs (MS SQL Server, PostgreSQL, SSMS, Pentaho, Linux)
- Developed custom ETL tools to modify large numbers of files and manage databases (SQL, Python)

PERSONAL PROJECTS – See <http://jacobbeauchamp.com/projects> for details

Connectrix: A Privacy-Preserving IoT and Personal Data Analytics Platform

December 2016 – Present

<http://jacobbeauchamp.com/connectrix>

- Prototyped for a SaaS startup, enables users to connect, aggregate, and privately analyze personal data (e.g. Fitbit, YouTube) using apps published to the Connectrix platform by a community of developers (Node.js, MongoDB, Express, AngularJS, Python)

84.51 Hackathon: Predicting Consumer Demand

August 2017 – August 2017

<http://jacobbeauchamp.com/hackathon8451>

- Predicted consumer demand by analyzing tweets for sentiment toward products, calculating trends over time, and extrapolating with linear regression (Python, Node.js, Pandas, NLTK)

Twitter Data Mining for Sentiment Towards Economic Inequality

August 2016 – December 2016

<http://jacobbeauchamp.com/twitterMining>

- Mined Twitter data with text sentiment analysis to discover attitudes about economic inequality (R, IBM Watson)

SKILLS

Coding: Java, JavaScript, Python, R, SQL, HTML, CSS

Technologies: Hadoop, Spark, Node.js, Express, AngularJS, MongoDB, Mongoose, TensorFlow, Linux