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

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 (Node.js, MongoDB, Express, AngularJS, Python)
- Enables users to connect to personal data sources (e.g. Fitbit, Moves, YouTube) and analyze that data in aggregate for insights into their lives
- Enables data scientists to develop and publish Python analytics apps to the Connectrix App Store
- Architected to preserve users' personal data privacy by running Connectrix Apps on Connectrix servers

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