Jackson A. Killian

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150 East 13th Avenue, Apt R, 43201, Columbus, OH

EDUCATION

Ohio State University, Columbus, OH   Expected Graduation- May, 2018
B.S. Physics, B.S. Computer & Information Science   Arts and Sciences Honors College
Major GPAs: 4.00, 3.99   Overall GPA (4.00 scale): 3.993

Honors Societies:
Phi Beta Kappa National Honor Society (April 2016 – Present)
Phi Kappa Phi National Honor Society (October 2015 – Present)
Sigma Pi Sigma Physics Honor Society (January 2015 – Present)

QUALIFICATIONS

Computer and Technical:
- Proficient in C, C++, Java, C#, and Python
- Software Development/Research experience with Python, Bash, Linux environments, and MATLAB
- Web-design experience with ASP.NET, Python/Django, PHP, JavaScript, HTML and CSS
- Database-design experience with SQL, Visual Basic, and Microsoft Access
- Application Design Experience with SSMS and SSRS (SQL Server tools)
- Academic and Project experience with C, C++, Java, and C#
- Laboratory experience with C++, SciDavis, LabView
- Proficient with all Microsoft Office software

Coursework Includes:
- Computer Science: Software Development (Java/C++); Computer Systems (C); Computer Algorithms; Database Systems; Computer Architecture; Interactive Systems, Graphics (C#); Neural Networks; Machine Learning
- Mathematics: Probability and Statistics; Calculus; Differential Equations; Linear Algebra
- Physics: Classical Mechanics; Quantum Mechanics; Electricity and Magnetism

RELATED EXPERIENCE

The Ohio State University, Dreese Labs, Columbus, OH
Computer Science Research Lead (May, 2017 – present) – *Undergraduate Thesis Project*
- Design study to gather smartphone sensor data and Transdermal Alcohol Content (TAC) from 19 students
- Design iOS and Android application to continuously collect and send sensor data over 12 hours
- Design server to receive, process, store, and visualize data streams from 19 sensors over 12 hours
- Use MATLAB to process noisy accelerometer and TAC signals and design filters to ease downstream analysis
- Use MATLAB and python to extract features from signals and design intelligent systems to make classifications

The Ohio State University, Biomedical Research Tower, Columbus, OH
Biophysics Research Assistant (January, 2015 – present)
Pelotonia Undergraduate Research Fellow (May, 2016 – May 2017)
- Develop software with Python to design computational workflows for high-throughput sequencing data
- Design web applications for bioinformatics tools using Python, PHP, JavaScript, HTML and CSS
- Utilize the Ohio Supercomputer Center to analyze terabyte-order datasets
- Collaborate with team of biologists and computer scientists in the cancer research space to identify novel characteristics in human genes and epigenetics
- Lead fellowship research project to design computational workflow to make widely-available, low-quality cancer samples useable in next generation sequencing experiments

PNC, Philadelphia, PA
Application Developer Intern (May 2017 – August 2017)
- Work on software team to develop two ASP.NET web applications to support business operations
- Maintain Python/Django web application while redesigning as ASP.NET application
- Design and implement comprehensive data integrity test cases during database technology transfer
- Design and implement SQL Server Databases and Reports to support applications

Delaware City Bus Company, Sewell, NJ
Database Designer (June 2015 – present)
- Design MS Access database for private bus company with 150 bus routes, 80 buses, and 600 employees/students
- Implement functionality to track billing for all routes, auto-generate schedules for drivers and aides, auto-create and populate all company reports and state forms
- Implement custom back-end using SQL and VBA to provide a tailored, seamless UI/UX
- Provide technical support and implement regular updates to adapt to new user needs

ACTIVITIES AND ADDITIONAL MERIT
- Achieved Dean's List (>3.5 GPA) 8 semesters
- National Buckeye and Maximus Scholarship Recipient
- First author on manuscript for novel bioinformatics web application
- Conceived/piloted "ShowOHI/O," a tech showcase featuring 20 student projects, 60+ professional attendees
- Web-team lead for OHI/O, Ohio State's hackathon program
- Webmaster of Big Data and Analytics Association (BDAA) at Ohio State
- At Hackathon, built Bluetooth stethoscope, touch pad and app to operate phone for CDC contamination suits
- Led project team of 4 to perform open-ended text analysis on survey data for Columbus Collaboratory