

Josh D Lane

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EDUCATION

Wesleyan University, Middletown, CT

Bachelor of Arts, GPA: 3.67/4.00

Major: Molecular Biology and Biochemistry; **Certificate:** Integrative Genomic Sciences

Awards: *Scott Biomedical Prize 2019, CSA Scholar Athlete Award 2019, NESCAC All-Academic Honors 2017*

EXPERIENCE

Data Scientist, CKM Analytix, New York, NY

Sept 2019 – Present

- Developed a set of analyses in Python to describe queue management efficiency in a service desk environment
- Modeled a multi-level service desk as a discrete-event simulation in python to study the effect of different queue management styles on various KPIs
 - Created an optimized queue management algorithm flexible to clients' priorities based on research via these simulations
- Productionized simulation to ingest historical audit logs and calculate opportunity cost against our optimized queue management algorithm
- Led and executed the effort to build our queueing analytics module into a web application using Django, JavaScript, Ajax, and D3
- Worked on R&D projects directly with Chief Innovation Officer and presented proposals to CEO and Product Owner
- Regularly led stakeholder meetings on project status and collected feedback on new features
- Joined internal Machine Learning team to understand how to leverage ML and NLP for future projects

Research Assistant, New York Genome Center, New York, NY

Jun 2018 – May 2019

Center for Genomics of Neurodegenerative Disease

- Developed a high-throughput platform for characterizing the length of the C9orf72 hexanucleotide repeat expansion associated with ALS and FTD via Next Generation Sequencing
- Utilized CRISPR/Cas9-Assisted Targeting of Chromosome segments (CATCH) for enrichment of the C9 loci
- Prepared libraries for and conduct Oxford Nanopore Sequencing (ONT)
- Developed novel computational approaches in R to determine repeat expansion length from raw sequencing data
- Internship was extended following promising results

PEER-REVIEWED PUBLICATIONS

Lanno SM, **Lane J**, et al. (2017). Transcriptomic Analysis of Octanoic Acid Response in *Drosophila Sechellia* Using RNA-Sequencing. *G3* 7(12)3867-3873.

PROJECTS

NYS Covid-19 Testing Watch

- Utilized an API from the New York State Department of Health to create a mobile dashboard that provides accessible and up to date testing data on the county level
- Built in React Native and utilized D3 to create interactive visualizations from the data

Portfolio Website - *JoshDLane.com*

- After enjoying using React Native, I built my website in React to continue growing my skills using this library
- Using Netlify and Buddy Works to deploy using continuous integration

TECHNICAL SKILLS

Python, React.js, React Native, D3, R Programming, JavaScript, Pandas, Django, node.js, Jupyter Notebooks, Jira, Git, Netlify, Buddy Works, Microsoft Excel & VBA, Microsoft PowerPoint