Gerald McCollam

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EDUCATION

JOHNS HOPKINS UNIVERSITY
MS in Bioinformatics
Exp: Dec 2019 | Baltimore, MD
Cum. GPA: 3.85 / 4.0

NEW YORK UNIVERSITY
Cognitive/Computer Science
May 1997 | New York, NY
Gallatin School
Cum Laude
Cum. GPA: 3.65 / 4.0

LINKS

Github:// **geraldmc**
LinkedIn:// **geraldmc**
Blog:// **geraldmc.github.io**

COURSEWORK

GRADUATE
Algorithms for Bioinformatics
Biostatistics
Epigenetics & Gene Expression
Machine Learning
Metagenomics

UNDERGRADUATE
Operating Systems
Information Retrieval
Functional Programming
Unix Tools and Scripting

SKILLS

PROGRAMMING
Over 5000 lines:
Python • Shell • R • SQL
Over 1000 lines:
Ruby • Go • C++
Familiar:
Scala • iOS • CSS • JS

STATISTICS
R and Bioconductor
SciPy • SAS • SPSS

DATA SCIENCE/ML
Pandas • Scikit-Learn
Flask • Keras API

CERTIFICATION
• CCDH, Certified Hadoop Developer
• AWS Solutions Architect (Associate)

EXPERIENCE

OPENMINE | Cloud Solutions Architect (Genomics)
Jan 2011 - Present | New Orleans, LA
- Scientific data engineering and analysis at scale.
- Automated deployment and monitoring of web/cloud services.
- Ontology-driven database schema development.
- Bioinformatic pipeline and protocols development.
- High Throughput Sequence analysis (DNA Seq, mRNA Seq, ChIP Seq)
- API development.

BLADELOGIC/BMC | Solutions Architect
Jul 2005 - Feb 2009 | New York, NY
- Principal architect for Pfizer, Novartis, Merrill Lynch, and Vanguard.

EDS/HEWLETT PACKARD ENTERPRISE | Sr. Consulting Engineer
Feb 2003 – Jun 2006 | New York, NY
- Consulting Engineer to Time-Warner, Reuters, and MSNBC.

LOUDCLOUD | Consulting Engineer & Team Leader
Jan 2001 – jan 2003 | New York, NY & Sunnyvale, CA
- Managed a distributed team of network, dba, site-reliability, and sysadmin support engineers for 24/7 operations.

RESEARCH

USDA SUSTAINABLE AGRICULTURE RESEARCH AND EDUCATION | Grant Writer and Researcher
Mar 2016 – Jan 2019 | Houma, LA
- Conceived and managed a 2-year **USDA Producer Grant** on crop yield using hyper-spectral imagery captured via aerial drone.
- Predicted yield via machine learning.

ATALLAH LAB | Genomics Researcher
Sep 2017 – Present | New Orleans, LA
- Genomics research initiative to explore LINE-1 retrotransposon behavior.

NYU CENTER FOR NEURAL SCIENCE | HHMI Research Associate
Sep 1993 – Dec 1997 | New York, NY
- Led graduate training of students in a range of neurophysiological techniques.

AWARDS

2016-18	**Producer Grant, FS14-282**	USDA Agricultural Research
2014	Jason Stamps Scholarship Award	University of New Orleans
1997	Founder's Day Award	New York University

PUBLICATIONS

[1] J. LeBien, G. McCollam, and J. Atallah. An in silico model of retrotranposon mediated neoplastic evolution. *Nucleic Acids Research*, in press.

[2] G. McCollam and R. Johnson. Correlating nitrogen application rates and sucrose yield in sugarcane. *Sensors*, submitted.