

Lead Software Engineer with 5 years of experience building a highly autonomous product team: designing, planning, delivering, and supporting Machine Learning Solutions on both PCF and AWS. Highly motivated and engaged by team collaboration and continued learning. Passion for mentoring and communicating. Reveler in tricky code, terraform, and CICD pipeline challenges. Former circus aerialist, current overcommitted gardener, and always voracious reader.

CORE PROFICIENCIES

Notable Experience		Notable Coursework & Cont. Edu.
► Java & Python	► Terraform	► Diversity and Inclusion Efforts
► Microservice & OOP Design	► CICD, Automated Testing	► AWS Sagemaker Workshop 2019
► AWS architecture & development	► Maintenance, Disaster Recovery	► Agile Dojo 2021

PROFESSIONAL EXPERIENCE

State Farm Insurance, Bloomington, IL

Lead Software Engineer

2021 – Present

- Developing, deploying, and maintaining Java & Python backend products on PCF and AWS.
- Designing solutions and drafting business requirement with great engagement with business partners and data scientists.
- Mentored multiple new hires, joining team members, and new managers on our products, and coordinated a bimonthly suite-level forum meeting for engineers and other technical roles.
- *Most Recently* - led and coordinated the development and deployment of an event driven claim routing product on AWS, allowing specialized teams to more quickly respond to complex claims.

Software Developer

January 2019 - 2021

- Implementing Machine Learning Solutions in P&C Claims for efficient claims triage.
- Using Agile software development practices with a mind toward DevOps best practices including branching strategy/version control/gitops and microservice design
- Developing and maintaining Java & Python on PCF and AWS using Behavior Driven Development principles and micro service architecture. Used CICD, Vault, Postgres, Config Server, Terraform, Lambda, SQS, DynamoDB, S3.
- Attended Amazon Web Services Sagemaker Conference

Illinois State University, Normal, IL

August 2018-Dec 2018

Teaching Assistant, Department of Mathematics

- Instructed Fundamentals of Statistical Reasoning: creating and proctoring exams and grading.
- Tutored students, addressing questions and concerns.
- Presented class progress reports to my supervisor and recommended organic course changes.

11th International Symposium for Biomathematics, Ecology, Education and Research 2018 Conference Organizer

- Organized all speaker sessions and mini-symposiums schedule, coordinated with speakers, including plenary and keynote speakers, approving all materials and abstracts to ensure quality content.
- Utilized Microsoft Suite tools for conference administration, i.e. conference website, program, attendee materials.
- Coordinated pre-conference and on-site support at hosting institution, Arizona State University.

Donald Danforth Plant Science Center, St. Louis, MO

May 2018- August 2018

Bioinformatics Intern

- Software development of PlantCV, a suite of Computer Vision tools for High-throughput Phenotyping.
- Implemented a new color space standardization method in PlantCV as a subpackage and developed a new, robust method for background subtraction, including associated software testing and documentation.
- Processed large image dataset at Danforth's HTCCondor computing cluster, applying parallel computing techniques and batch processing.
- Analyzed preliminary phenotype data from image processing and prepared for downstream processing.
- Published contributing author for PlantCV citation.

Scribe America, St. Louis, MO

April 2017-April 2018

Medical Scribe, SSM St. Mary's Hospital

- Documented patient charts by assisting ER physicians during patient appointments using Epic Healthcare Clinical Software to maintain accurate patient records, administering provider messaging and support.
- Completed training and on-going education for required medical terminology and ER practice protocols.
- Assisted patients by coordinating comforts, i.e. food, pillows, blankets.

EDUCATION

Post-Baccalaureate Studies in Computer Science & Bioinformatics

Fontbonne University, St. Louis, MO

- GPA: 3.82/4.0
- Dean's List, all semesters

Bachelor of Science in Mathematics

Illinois State University, Normal, IL

- GPA 3.25/4.0
- Honors Program
- Accelerated admission entering with sophomore standing

RESEARCH

Donald Danforth Plant Science Center

Image Processing for high-throughput Phenotyping

Summer 2018

Citation: Berry JC, Fahlgren N, Pokorny A.A., Bart RS, Velez, KM (2018) An automated high-throughput method standardizing image color profiles to improve image-based plant phenotyping. *PeerJ* 6:e5727. <https://doi.org/10.7717/peerj.5727>

- Implemented a method for color space standardization as a new subpackage in PlantCV, a software for Plant Phenotyping written in Python using OpenCV, Numpy, Matplotlib and others, available on GitHub.
- Developed, tested and completed documentation for the subpackage, available here: <https://plantcv.readthedocs.io/en/latest/>
- Presented research as the only M.S. student speaker within the program curriculum at the 11th International Symposium for Biomathematics, Ecology, Education and Research (BEER-IX), Tempe AZ, October 2018.

VOLUNTEER & EXTRACURRICULAR ACTIVITIES

- STEM Mentor. State Farm (Good Act Award) 2019 - 2020
- Juggling Teacher - State Farm (Good Act Award) 2019
- Student Member, Association for Computing Machinery 2017 - 2019
- Circus Aerialist: Bumbershoot Aerial Arts & Gamma Phi Circus 2010 - 2019
- Women in Technology and Science at Illinois State University 2015 - 2018