

# Bryan Boyett

· [github.com/bryanat](https://github.com/bryanat) · boyettbryan@gmail.com · (336) 543-7020 · Atlanta, GA ·

## Experience

### Fourthbrain | Machine Learning Engineer Graduate

Remote (USA)

- Led a team of 3 in a half year project to build and deploy an AI logistics solution using Deep Reinforcement Learning.
- Deployed to AWS EC2 cloud using Docker and devops procedures that streamlined deploying ML model updates.
- Created React frontend to render and visualize the optimized 3D packing scheme generated by Unity ML data pipeline
- Leveraged TensorBoard dashboard for realtime monitoring, insights into training progress, and model performance.
- Architected and designed the whole pipeline to pass data from the simulated physics environment to the ML model.
- Experimented with algorithms for training agents in Unity with C#, Pytorch, Gym, and fine-tuning hyperparameters.

### Infosys | Software Developer (Data Engineering)

Charlotte, NC & Remote (USA)

- Developed data-driven projects using Spark, building Data Engineering Pipelines for processing and data analytics.
- Contributed to data integration modules and big data ETL processes within a distributed computing framework.
- Ingested data via Kafka and processed the data via Spark to store it into a data warehouse for others to query.
- Worked on data ingestion pipeline utilizing Spark and Kafka to stream and aggregate data from multiple producers.
- Apart of a team that replicated OLTP transactional data to OLAP database for data analytics and historical patterns.
- Built interactive dashboards and reports highlighting insights and key metrics derived from data pipelines.
- Provided production support by troubleshooting and fixing bugs that impacted performance of data pipelines.

### Revature | Software Developer (Junior Team Lead)

Charlotte, NC & Remote (USA)

- Leader of 3 teams during employment, acting as team lead amongst increasing sized teams of junior developers.
- 1st project was top contributor and highest performer out of a group of 24 junior developers. Improved query speeds by demonstrating performance of streaming objects via async vs sync methods from a nosql database.
- 2nd project: leader of 4-developer team in creating a Spark batch ETL pipeline to extract, transform, and load batch data on gigabyte-scale into Hadoop HDFS, enabling scalable data analytics and querying via Apache Hive HQL.
- 3rd project: leader of 11-developer team in building a Spark + Kafka stream pipeline utilizing a multithreaded pubsub model for realtime ETL and visualization of terabyte-scale data streamed through Kafka brokers on AWS cloud.
- Acted as project manager, planning and designing the end-to-end architecture and roadmap of each entire project, creating and managing teams along the way, integrating code daily and prioritizing tasks to meet weekly objectives.
- Code reviews performed daily, hosted daily standups and managed agile/scrum sprints fixing bugs and blockers.

### Geek Squad | Advanced Repair Agent (IT)

Charlotte, NC

- Repaired computers and phones, including operating systems, hardware, screens, and various software repairs.
- Interfaced with customers to offer various repair options and fulfill service requests with detailed documentation.
- Diagnosed various issues with personal computers and fixed them in both standard procedural and creative ways.
- Troubleshooted Windows, macOS, iOS, Android, Microsoft Office, and others simultaneously repairing in parallel.
- Provided on-site computer repairs, upgrades, updates, software support, and consultations to clients.

### University of Georgia Enterprise Information Technology Services | Help Desk (IT)

Athens, GA

- Provided quality technical support to students, staff and faculty over a broad array of UGA systems.
- Resolved technical problems independently through a queue, remotely, tickets, over the phone and in person.
- Configured university account data for desktops and mobile devices through the university's tailored admin system.
- Corrected network connectivity issues with user devices and access points on UGA's wired and wireless network.
- Assisted the data merge of faculty accounts and sensitive information to Archpass, UGA's remote access VPN.
- Reduced the workload on busy admins by voluntarily assisting with challenging service requests.

### Meteor | Community Meetup Host

Athens, GA

- Coordinated and independently led community Meteor meetups sponsored by Meteor Development Group.
- Educated UGA computer science students and local professionals about the framework's core technologies.
- Demonstrated how to code with Meteor and built example apps showcasing the framework's capabilities.
- Hosted an annual public meetup with UGA's computer science club once every year since freshman year.

## Education

### University of Georgia | Franklin College of Arts and Sciences, Incomplete

Athens, GA

- Bachelor of Science in Mathematics, 3.61 GPA 140+ credit hours

## Skills & Interests

**Skills** | coding, programming, software development; very strong experience with desktop and mobile operating systems including android, ios, windows, macos, and linux (unix); debugging and troubleshooting computers, software, smartphones, tablets, printers, routers, and common office hardware devices; building computers (cpu, gpu, ram, hdd, ssd, psu, mb); light devops and project management (documentation, confluence, slack, trello, jira, agile, scrum, sprints, envs, aws amazon web services, ssh, cron, git, docker); ability to quickly learn new tech, frameworks, libraries, systems, topics, and company ways; algorithms, mathematics; strong technical and problem-solving skills; technical support and customer service; excellent communication and english skills; genuine, friendly, dependable, productive; highly self-motivated and self-driven;

**Coding** | Programming (UE5, Javascript, Typescript, Node, Scala, C#, Python, React, Redis, Pandas, Git, Bash Unix shell); Developing Android apps (React Native, Meteor, Mobile UI); Javascript (ES6, events, fundamental objects, control statements, arrow functions, modules, promises, regex, jsdoc, dom); Node (npm, events, streams, buffers, streams, http, rest, crud, async io, callbacks); Python web development (flask, django); Mongo & Redis (collections, cursors, query operators, block scoped variables, crud, json, nosql databases); VSCode (programming, scripting, ide, copilot, chatgpt); Notebooks (Jupyter, Google Colab); Git (commits, branches, forks, pulls, version control); React (components, props, state, jsx); Meteor (templates, blaze, spacebars); OOP Fundamentals (objects, classes, scope, inheritance, encapsulation, abstraction, polymorphism, constructors, data structures); currently upgrading on new technologies (langchain, vector databases, rag); pair programming; fixing bugs; learning new APIs; startups; ability to work within organizations with minimal structure and with minimal direction;

**Unreal Engine & 3D Software Development** (personal project)

## Projects

**Machine Learning Projects (Data Science & 3D AI)** | Pandas, Python, Pytorch, Huggingface, Sklearn **Remote (USA)**

- 3D DRL <https://github.com/bryanat/Reinforcement-Learning-Unity-3D-Packing> 🏆 Led a team of 3 to create an automated shipping container packer using unity ml-agents, a deep reinforcement learning lib in a 3D environment.
- machine learning (ai): <https://github.com/bryanat/ML-11> 🏆 various machine learning programs in notebooks
- summary: Machine Learning (sklearn, classification, regression, clustering, pca, sentiment analysis, dimensionality reduction, feature engineering, supervised learning); Deep Learning (tensorflow, keras, pytorch, huggingface, transformers, neural networks, artificial intelligence, generative ai, llms, training, fine tuning); Deep Reinforcement Learning (unity, ml-agents, gym, C#); Data Science (pandas, numpy, data transformations, data analysis, pyspark); Visualization (seaborn, matplotlib, tensorboard dashboard, react fbx frontend); Notebooks (jupyter, google colab); aws ec2 cloud deployment, docker containers, light mlops and devops; ml models, apis, json, webgl, python;

**Data Engineering Projects (Big Data & Data Analytics)** | Spark, Scala, Kafka, Hive, SQL, RDBMS, ETL, AWS EC2`

- data engineering (major): <https://github.com/bryanat/bigdatacapstone> 🏆 Team Lead of 11 creating a spark + kafka pipeline that processed (etl) and streamed terabytes of data on aws cloud using a multithreaded pubsub model.
- data analytics (major): <https://github.com/bryanat/Wildfire> 🏆 Team Lead of 4 creating a big data pipeline to load and transform batches of millions of rows of california wildfire data joined onto a table with weather data called from a restful http api, query via spark sql and hive hql, visualize via zeppelin and d3.js, and store via hadoop hdfs.
- data analytics (minor): <https://github.com/bryanat/pone> Scala + Spark + Hive + SQL, dataframes, rdds, streams
- small program (minor): <https://github.com/bryanat/pzero> Scala + Mongo collections, crud, async and sync
- summary: Spark (spark core, spark streaming, spark sql, spark mllib, scala spark api, pyspark api, dataframes, rdd); Big Data (hadoop, hdfs, mapreduce, distributed computing concepts, cluster, kafka, spark, data warehouse, datalake); Databases & Query Languages (mongo nosql, mysql sql, hive hql, s3 buckets, rdbms, parquet); Languages (scala, python); ETL pipelines (Extract > Transform > Load, Ingest > Store > Process > Query > Analyze > Viz); Visualization (zeppelin, d3.js, power bi); akka, linux bash, aws cloud, partitioning, replication, dag, streaming through kafka brokers; Data Engineering (data processing, data ingestion, data integration, data visualization, data warehousing, data);

**Full Stack App Development Projects (Mobile & Desktop Web)** | React, Redis, Javascript, Node, Mongo, NoSQL

- app development: <https://github.com/bryanat/DvD> React + auth + ui design + nosql database + express server
- frontend: <https://github.com/bryanat/sampler-frontend> Javascript, React, React Native, Expo, HTML, CSS, UI
- backend: <https://github.com/bryanat/sampler-backend> JS, Node, Express, Redis, Mongo, websockets, pubsub
- server api: <https://github.com/bryanat/fullstack-playlist> React + Redis OM (object mapping JSON to Redis API)
- 3D react frontend: <https://github.com/bryanat/React3D> React + Unity Engine 3D .fbx file renderer (three.js), the frontend for <https://github.com/bryanat/Reinforcement-Learning-Unity-3D-Packing> AI/ML project listed above
- summary: Software Development (git, github, linux, ubuntu, bash, vscode, npm, conda, sbt, logging, package managers, build tools, envs, aws) Web & App Development (react, react native, expo, javascript, node.js, express, axios, http, requests, promises, rest, restful web api, api server endpoints, material ui, mvc, uuid, websockets, pubsub, json, authentication), Functional Programming, Math, NoSQL Databases (mongo, Redis!);