Nicholas Bindela

New York, New York | Software and Machine Learning Engineer
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EDUCATION

Columbia University — New York, NY
M.S. in Computer Science - Machine Learning concentration, **GPA: 4.2** — Expected Dec 2025
- Relevant coursework: Databases, Algorithms, Artificial Intelligence, Applied ML, UI Design, AI in Finance

Bucknell University — Lewisburg, PA
B.S. in Computer Science and Engineering - Economics minor, **GPA: 3.7** — May 2021
- Relevant coursework: Linear Algebra, Discrete Structures, Multi-Var Calculus, Probability & Statistics

LANGUAGE AND IT SKILLS

Languages & Frameworks: Python, SQL, Next.js, Node.js, React.js, Javascript, TailwindCSS, HTML5, CSS3
Python Libraries: Flask, FastApi, Numpy, Pytorch, Scikit-learn, Matplotlib, Pandas, TensorFlow
Tools & Platforms: AWS, Terraform, Jenkins, Git, Postgresql, MongoDB, MySQL, Apache Spark
AWS: EMR, EC2, S3, Route53, DynamoDB, Lambda, ECS, SQS, SNS, Kinesis, Fargate, Cloudwatch, EventBridge, Aurora

WORK EXPERIENCE

Stealth Startup (Part-Time) — New York, NY
Technical Lead — Jan 2025 - Present
- Partnered with the CEO to translate the business vision into a functional MVP, defining scope, technical requirements, and product roadmap. Managed a 3-engineer team by creating Epics/User Stories, distributing tasks, and providing technical guidance
- Architected and built the full-stack application: a Next.js frontend with Tailwind CSS, a Python backend, and Firebase resources. Set up GitHub version control, CI/CD pipeline with Google Cloud Deploy + Firebase Hosting, local integration testing, and REST APIs for frontend integration

Chewy — Boston, MA
Software Engineer II — Oct 2024 - Sep 2025
- Spearheaded the design and implementation of new services on the supply chain platform, leading architecture, development, testing, and adoption of client-facing features while ensuring smooth integration with existing systems
- Built a multi-service architecture on AWS ECS, connecting a frontend to a backend with Aurora Postgres, orchestrating ML workloads on EMR, and enabling event-driven processing with DynamoDB and Kinesis for real-time status updates and communication

Software Engineer I — Sep 2022 - Oct 2024
- Built a service to load input data to S3, utilized Crawlers to make data available to query in Athena, created EventBridge schedules to trigger 8+ ML models to run on EMR
- Implemented Lambdas to process output data from ML models and then send to external systems. Data is used to send Purchase Orders to over 100 vendors each day

Ask2AI (Part-Time) — New York, NY
Machine Learning Research Assistant — Jun 2024 - Aug 2024
- Led development and evaluation of predictive models for commercial loan defaults, training and testing over 10 linear and tree-based models to improve prediction accuracy
- Improved previous best AUC by 11%, achieving a new high of 0.96—surpassing prior benchmarks through advanced feature engineering, data preprocessing, and hyperparameter tuning
- Utilized Shapley Adaptive Reasoning to enhance model interpretability, revealing a commercial loanee's industry—particularly in Technology—significantly impacts default probability

FAST Enterprises — Hartford, CT
Implementation Consultant — Sep 2021 - Aug 2022
- Implemented a tax refund subsystem using C# and MySQL, resolved refund-related issues during two major software rollouts, and ran weekly client meetings to refine software functionality based on feedback

Bucknell University — Lewisburg, PA
AI and Cognitive Science Research Assistant — Jun 2019 - May 2020
- Conducted NSF-funded research over 12 months to develop a cognitive agent API using Python and Common-LISP, enabling human-like agents to learn from simulated environments and perform simple tasks

PROJECTS

End-to-End Social Media App: UI/UX & Fullstack Development — Sep 2024 - Dec 2024
- Designed and developed a social media application by consulting stakeholders, prototyping 30 potential solutions, creating low and high-fidelity screens, and implementing a React front end with a Flask back end

Predicting Spotify Track Popularity Using Regression Models — Sep 2024 - Dec 2024
- Built and optimized regression models to analyze a dataset of 30,000 Spotify tracks, achieving a 9% improvement in MAE compared to baseline models and identified key predictors danceability, energy, and valence, with tree based models having best performance