

# Ridwan Alam

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## **Professional Summary**

Innovative AI specialist with 4 years of specialized experience in advanced analytics, machine learning, and statistical modeling, plus 9 years of overall professional expertise. Proven track record delivering impactful solutions across technology, insurance, renewables, transportation, and blockchain. Skilled at leading cross-functional teams and translating complex data into strategic business outcomes. Award-winning Blockchain developer, recognized at MIT Blockchain and Las Vegas Bitcoin Hackathons for Bitcoin-based payment systems, Lightning Network integrations, and real-world asset authentication tools. AI expertise includes deep learning for autonomous vehicle perception and market-driven cryptocurrency sentiment analysis, leveraging YOLO and advanced NLP techniques to drive insights.

## **Technical Skills**

**Programming:** Python, SQL, React, TypeScript, JavaScript, HTML, CSS

**Machine Learning:** Natural Language Processing (NLP), Supervised & Unsupervised Learning, TensorFlow

**Data Science Models:** Random Forest Classifier, XGBoost Classifier, Generalized Linear Model, Logistic Regression

**Data Science Packages:** Pandas, NumPy, Scikit-learn, Seaborn, Matplotlib

**Databases:** BigQuery, Snowflake

**Cloud:** Google Cloud (GCP), Amazon Web Services (AWS)

**Other Tools:** Cursor, Claude Code, Visual Studio Code, GitHub, Expo, Tailwind, Tableau, Jupyter, PyCharm

## **Work Experience**

**Creator & Host**, July 2025 - Present

**Bitcoinomics21 Podcast**, Remote

- Translate technical Bitcoin, cryptocurrency, and economics mechanics into educational content for a lay audience
- Presented insights on global economic trends to foster financial literacy and preparedness among listeners
- Execute a multi-weekly publishing schedule, handling research, recording, and post-production
- Interview subject matter experts and industry leaders within the fintech and economic sectors
- Building an active presence across Spotify, YouTube, Substack, and Twitter
- Proposed a Municipal Bitcoin Strategic Reserve to the Newport News, Virginia, City Council

**Freelance Data Scientist**, July 2025 - Present

**DigiLabsAI**, Remote

- Stealth Startup Contract
  - Created AI platform to collect and process posts from Twitter and BlueSky
  - Performed sentiment analysis and topic modeling to extract insights
  - Structured results in Supabase database by linking raw posts with derived Natural Language Processing data
- Law Tech Startup Contract
  - Architected document comparison web application using Python
  - Performed semantic similarity analysis across legal documents by clustering similar legal documents, quantifying similarity score between documents, and black-lining (difference visualization) of textual discrepancies

**Freelance Blockchain Developer, April 2024 - Present**

*Freelance*, Remote

- Bitcoin CashuCloak Mobile App
  - Las Vegas Bitcoin Hackathon Honorable Mention
  - Tech Stack: Python, React Native, Bitcoin Lightning (LND)
  - Engineered a privacy-focused mobile wallet utilizing steganography to encrypt BTC directly within image files
  - Implemented Lightning Network interoperability, enabling users to generate invoices and execute BTC settlements
- BitLoan P2P Micro-Lending Platform
  - MIT Blockchain Hackathon Participant
  - Tech Stack: Python, Streamlit, LNbits, Voltage
  - Architected peer-to-peer lending platform facilitating non-custodial Bitcoin borrowing via the Lightning Network
  - Integrated Voltage node to ensure high-uptime liquidity management and secure transaction routing

**Senior Data Scientist, June 2021 - April 2024**

*The General Car Insurance*, Remote

- Developed Logistic Regression Model for lead transfers, resulting in a 2% increase in sales and \$23 million in profit
- Deployed Real-Time Bidding Generalized Linear Model, with Poisson Distribution, increasing Click-Through Rate (CTR) by 80%, decreasing Customer Acquisition Cost (CAC) by 47% and increasing Revenue/Spend by 91% by strategically targeting Lifetime Value (LTV) and Expected Premium for advertising and marketing campaigns
- Constructed a Random Forest Classifier Model using Natural Language Processing (NLP) techniques, including TF-IDF, Sentiment Analysis, and Topic Modeling, achieving 98% accuracy in identifying not-at-fault Claims
- Executed A/B testing and conducted statistical analysis utilizing p-values and confidence intervals for decision-making
- Monitored model performance and retrained models as needed
- Created data visualizations and dashboards with Tableau and Python for decision-making and performance tracking
- Performed data querying and aggregation using SQL in Snowflake and BigQuery, and Python in Jupyter Notebook
- Facilitated meetings with Marketing, Claims, Data Warehousing, and Data Engineering Stakeholders for B2C initiatives
- Provided mentorship to two individuals transitioning into Data Science through the In-Residence program

**Business Development Manager, Feb 2023 - July 2024**

*Swisspod Hyperloop*, Remote

- Successfully cultivated client relationships with U.S. state and federal agencies, resulting future partnerships
- Developed a comprehensive feasibility study for a hyperloop freight transportation system
- Compiled and analyzed municipal, regional, and national data to identify the optimal initial pilot route

**US Public Affairs & Feasibility Studies Contributor, May 2021 - Jan 2023**

*HyperloopTT*, Remote

- Engaged with US public and private sector clientele, articulating the economic advantages of hyperloop technology
- Established professional relationships with the Port of Virginia, Virginia Passenger and Railroad Authority

**Account Manager, Apr 2019 - Aug 2019**

*Bright Power*, New York, NY

- Secured over \$1,000,000 in new solar and energy contracts with more than 40 affordable housing clients
- Developed LIHTC (Low-Income Housing Tax Credit) financing options from state and city agencies
- Created proposals incorporating energy efficiency and solar solutions, demonstrably reducing CO2 emissions

**Commercial Project Developer, Oct 2018 - Jan 2019**

**Solar Landscape, New York, NY**

- Directed the development of a 54.4 MW commercial and industrial solar project pipeline, encompassing rooftop, ground mount, and carport installations
- Generated a pipeline of over 100 prospective client projects, ranging from 100 kW to 1.5 MW, for both direct purchase and Power Purchase Agreement options
- Educated customers on Federal Tax and State credits to decrease project cost and payback

**Energy Manager, Oct 2017 - Apr 2018**

**Aramark, New York, NY**

- Conducted comprehensive energy assessment at Queen's College to ensure adherence to New York City Local Law 87
- Developed and implemented Excel macros, resulting in a 98% increase in data analysis efficiency
- Tested temperature, air flow, static pressure and motor performance for over 13 Air Handling units

**Energy Engineer, July 2012 - Aug 2016**

**Ingersoll Rand, San Diego, CA**

- Conducted 180 energy studies in North America, resulting in \$2.5 million in cost savings with a 29% average savings
- Expanded new client relationships leading to \$1.5 million in revenue growth and \$2 million with current clients
- Communicated technical solutions to non-technical clientele, executive leadership, and B2C market segments
- Achieved highest accreditation as Air Master from US Department of Energy

**Education**

**Bachelor of Science, Industrial Engineering, Virginia Tech, Blacksburg, VA**

**Data Science Bootcamp, Metis, Sept 2020 - Dec 2020**