

JOHNNY DUNN

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Summary

Full-stack dev with NLP background, experienced in building and deploying E2E machine learning infrastructure and data pipelines, training models, prompt engineering, and working with LLMs. Main expertise in Python, TypeScript / JavaScript, and React / Next.

Professional Experience

Tilting Point

New York, NY

Senior Blockchain Engineer

Nov 2021 – Feb 2023

- Acted as blockchain architect for marketplace backend and infrastructure for tokens / NFT integrations in Unity on Polygon.
- Developed ERC-20, ERC-721 smart contracts with custom metadata properties, REST APIs managing NFT metadata, blockchain indexing microservices for transaction events, and an internal airdropping service, in TypeScript deployed with Docker / Kubernetes. Architected secure multisig wallet operations; rescued \$1 million+ in MATIC from missent transactions.

eBay

New York, NY

Software Engineer 2 (Full-Stack)

June 2020 – April 2021

- Extended REST APIs in Scala & Spring-Boot to service data asynchronously based on item selections to UI, improving UX.
- Created E2E infrastructure enabling ML teams to test models in dev / staging sandboxes to see results in web UI, verifying data integrity with scrapers. Set up Jenkins pipeline in Kubernetes to connect UI libraries, SSR services, and ML data for ads.

Freelance (Grapple Media, Notebrush, Edelman, HereAfterLegacy)

Remote

NLP Engineer / Software Engineer / Product Designer (Contract)

November 2018 – Jan 2021

- Created user stories, animated wireframes and functional product demo for Notebrush's MVP.
- Developed web crawlers with automated pipeline for data to train news classifiers and sentiment analysis models for Grapple Media. Created a recommendation system for news stories. Developed infrastructure in Python and deployed with Docker.
- Trained models in PyTorch to create photo filters to apply stylization from films to selfies for Edelman's interactive AI exhibits.
- Sold sentiment analysis model and dataset to HereAfterLegacy, and continued development work to deliver their MVP.

IPSoft

New York, NY

Cognitive Implementation Engineer

June 2017 - December 2017

- Implemented modules for virtual assistant AI Amelia for corporate client-facing solutions following agile practices.
- Improved workflow and productivity by writing data processing scripts to be distributed to internal teams.

Projects

- **Quire.work** - Create autonomous AI agents able to perform / automate any type of task, powered by LLMs. 2023
<https://quire.work>
- **Restless** - Always-on anti-malware software using malicious language processing (HAN model) techniques. 2020
<https://github.com/jddunn/restless>
- **Text RPG Engine** - ES6 JS library to create text adventures / interactive fiction with custom player interactions. 2020
<https://github.com/jddunn/text-rpg-engine>
- **Dementia progression analysis** - Dementia progression classifier for MRIs using CNN and transfer learning. 2018
<https://github.com/jddunn/dementia-progression-analysis>

Education

- **Bachelor of Fine Arts in Design and Technology** (May 2017) – Parsons School of Design

Awards

- 5th Place, AT&T National VR and AR Challenge, with THiNKIMMERSIVE team. (<http://npe100.com/>) 2017
- XRC Labs Young Entrepreneurs Residential Program Spring 2017

Skills

Programming Languages	Python Go / Golang JavaScript TypeScript Java Scala C# SQL Solidity
Frontend	React Next.js Redux Toolkit (RTK) TanStack Query Zustand Jotai ChakraUI Shadcn-ui Tailwind D3.js three.js Bootstrap SCSS Less
Backend	FastAPI Django Tornado Keras TensorFlow PyTorch XGBoost ethers.js HardHat Geth LangChain Hugging Face OpenAI OpenCV Stable Diffusion spaCy Gensim NumPy SciPy pandas scikit-learn Celery Scrapy BS4 Selenium Puppeteer NestJS Express
Databases	MySQL Postgres Prisma SQLAlchemy Pinecone Weaviate MongoDB DynamoDB GraphQL Hadoop Spark Kafka Elasticsearch Redis
DevOps	AWS (Lambda, EC2, Elastic Beanstalk, Amplify, RedShift) Docker Kubernetes Jenkins
Tools / Software / Other	Unity Git Postman Linux Burp Suite Adobe Creative Suite Processing openFrameworks SketchUp PyCharm IntelliJ Visual Studio PWAs Electron Capacitor Android Studio