Nadja Rhodes

Software {Machine Learning} Engineer

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Work Experience

ASAPP Jan 2019 – Jul 2024

New York, NY

- Staff Machine Learning Engineer (Nov 2021 Jul 2024)
 - Led ML engineering team of three, with collaboration from a ~dozen research scientists and product engineers, to productionize new LLM-based customer support agent for a Fortune 100 airline client, enabling automating complex call center interactions.
 - Led team of four developing company-wide ML training framework used by all (~20) models, standardizing pipelines, remote
 compute access, dataset and model management, and external tool integration.
 - Architected multi-node distributed training on colocated servers using Kubernetes and Ray.io; collaborated on implementing training dataset indexing service for 10x faster dataset access (minutes to seconds).
 - Proactively built internal Slack bot as a passion project, providing thread summarization, ownership info, and trend detection to improve team communications.
- Lead Machine Learning Engineer (Jan 2019 Nov 2021)
 - Architected centralized routing layer between applications and ML services, migrating critical NLU components while
 orchestrating parallel model calls and unifying responses with entity handling and intent classification.
 - Led end-to-end development of named entity recognition service and entity highlighting for 1st voice client; owned domainspecific entity highlighting from planning to rollout, delivering 11% increase in entity card hover rates.

Microsoft Sep 2013 – Sep 2018

Redmond, WA

- Software Engineer II (Apr 2016 Sep 2018)
 - Rebuilt and open-sourced OneNote Web Clipper on a modern, React-like framework; led JS testing infrastructure and client-side telemetry implementation.
 - Led technical development of Web Clipper ratings prompt, increasing Chrome Web Store rating from 2.73 to 4.44 stars.
 - Spearheaded GDPR compliance plan for exporting OneNote content; pioneered and patented ML efforts in an incubation team
 of three, developing a task detection prototype.
- **Software Engineer** (Sep 2013 Apr 2016)
 - Led development and public launch of OneNote.com/notebooks entry point (4M MAU, 58K daily visits).
 - Enhanced backend for OneNote welcome emails and produced data-driven insights on site experimentation.

Education & Scholarship

OpenAI Scholar Summer 2018

OpenAI San Francisco, CA

- Granted scholarship to study deep learning under Dr. Natasha Jaques; focused on language modeling and generative text for NLP.
- Developed and open-sourced deephypebot, a generative language model that creates music commentary on Twitter. (Code, Talk)

B.S. Computer Science 2009 – 2013

Stanford University, School of Engineering

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Stanford, CA

Career Transitions & Engagement

- Recurse Center (Nov 2024 Feb 2025): Self-directed programming retreat in a peer-learning environment.
 Focused on web development, creative coding, and generative Al.
- Family Sabbatical (Jul Nov 2024): Dedicated time for parenting and early childhood development.
- Presentations & Conferences: OpenAl Scholars Demo Day (2018, deephypebot), RenderATL (2023), ACL (2019), NSBE (2018), GHC (2016), Y Combinator FFC (2014).
- Internships: NTT Communication Science Labs (2012), Google BOLD (2011), Stanford Research (2010).

Technical Skills

- Languages & Frameworks: Python, PyTorch, PyTorch Lightning, Jupyter, TypeScript/JavaScript, SQL, Hugging Face Transformers.
- ML & AI: NLP/NLU, Neural Networks, Large Language Models, Distributed Training, Fine-Tuning, Text Embeddings, Conversational AI, Multi-Agent Systems.
- Infrastructure: Kubernetes, Ray, Cloud Computing (AWS), CI/ CD Pipelines, Airflow, MLflow, Docker, Git.
- Backend & API Development: aiohttp/asyncio servers, ML inference APIs, Microservices, gRPC/Protocol Buffers, REST, API Gateway patterns, horizontally scalable services.