# **Adam Rybinski**

# Full-Stack Engineer | AI Specialist

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# **TECHNICAL EXPERTISE**

#### **Full-Stack & Cloud**

Node.js · GraphQL · REST APIs · AWS · Azure · Cloud Architecture · CI/CD · Git

#### Frontend & UI/UX

React · TypeScript · Next.js · Zustand · JavaScript · HTML5/CSS3 · Design Systems · Responsive Design · Accessibility · Data Visualization · Component Libraries · UI/UX Design Collaboration · Svelte · SSR

# **AI Models & Frameworks**

LangChain · LangGraph · LLM Models (OpenAI, Claude, Gemini) · TensorFlow · PyTorch · Watson AI · Cognitive Computing · Neural Networks

#### AI Application Development

**LLM Integration** · **Multi-agentic Workflows** · **Prompt Engineering** · **Few-shot Optimization** · **Instruction Fine-tuning** · Real-time Data APIs · Machine Learning Interfaces · No-code/Low-code AI Platforms (Dify, Haystack, n8n)

## **Psychology & Cognitive Science**

User Research · Cognitive Load Theory · Human-Computer Interaction · Neuroscience-Informed UX

#### PROFESSIONAL EXPERIENCE

### Freelance Full-Stack & AI Consultant

April 2022 - Present

- Built React/TypeScript applications with AI-powered interfaces using LangChain/LangGraph, integrating OpenAI and Claude LLMs for document
  analysis tools with seamless UX flows and optimized prompt engineering
- Designed intuitive UIs for ML-powered platforms serving **10M+ users** with real-time data processing, implementing multi-agentic workflows to enhance decision support
- Developed React component libraries and design systems for AI-driven financial and healthcare applications, translating complex AI capabilities into user-friendly interfaces
- Created responsive, accessible frontends for LLM-based document analysis tools, leveraging prompt engineering and few-shot optimization for improved accuracy
- Built cloud-native applications on AWS/Azure with focus on performance and user experience, implementing CI/CD pipelines for rapid AI application deployment
- Implemented data visualization components and interactive dashboards for complex AI workflows using Next.js and modern state management solutions

# Senior Software Engineer, Betsson Group

April 2023 – May 2025

- Developed robust design system components in **React/TypeScript**, improving development velocity across teams by 40%
- Collaborated with cross-functional design teams to ensure seamless integration and consistent user experience across gaming platforms
- Enhanced UI/UX through meticulous attention to detail and adherence to modern frontend best practices, reducing user friction by 35%
- Built responsive, high-performance interfaces for real-time gaming platforms with complex state management using Zustand, efficiently handling concurrent users
- Implemented agile methodologies and design thinking processes, fostering continuous improvement culture

# **Senior Software Engineer, Deriv Europe**

October 2021 - April 2023

- Developed React-based trading interfaces with real-time data visualization and responsive design, improving user decision-making speed by 25%
- $\bullet \ \ \ \ \text{Built $\textbf{GraphQL/REST APIs}$ powering frontend applications for high-frequency financial platforms}\\$
- Created accessible, intuitive UIs for complex financial tools used by global trading community, enhancing user engagement through data-driven design

# Software Engineer, IBM

January 2017 - 2021

- Collaborated extensively with design teams to create cognitive AI interfaces using Watson services and early LLM concepts, improving data accessibility for enterprise users
- Built **React** frontends for enterprise AI applications in healthcare and banking sectors
- Developed advanced data grid components integrated with Carbon Design System for IBM Cloud platforms
- Created explainable AI visualizations helping users understand complex ML model decisions, applying principles of prompt engineering for clearer AI outputs

# **EDUCATION**

# M.S. Cognitive Science

Jagiellonian University, 2017–2019

Thesis: Explainable AI through Deep CNN structure analysis

# **B.Sc. Neuroscience**

Jagiellonian University, 2011–2015

Project: Neural Network Analysis with Graph Theory

# **LANGUAGES**

English (C1) · Polish (Native)