Alex Corbin

Software Engineer

LinkedIn: kurbana Website: aimlee.github.io

SUMMARY

Results-driven Software Engineer Graduate(Dec, 2024) with deep expertise in Artificial Intelligence and Machine Learning, specializing in building fault-tolerant distributed systems and state-of-the-art models. Skilled at optimizing system performance, analyzing large-scale infrastructure issues, and delivering automated solutions that enhance operational efficiency. Proven ability to master and apply cutting-edge technologies while leveraging analytical expertise, coding proficiency, and systems thinking to solve complex reliability challenges.

SKILLS

- Frameworks & Web Technologies: React.js, Node.js, Django, Spring Boot, REST APIs, GraphQL
- Databases & Storage: PostgreSQL, MongoDB, SQL, Amazon S3
- Cloud & DevOps: AWS, Azure, Jenkins, Kafka, Windows Server
- Machine Learning & AI: PyTorch, TensorFlow, Scikit-learn, Transformers, Hugging Face, XGBoost, LightGBM, BERT, GPT, CNNs, RNNs, Transfer Learning
- Data Science & Analysis: NumPy, Pandas, Feature Engineering, Data Analysis, Research Methodology, Statistical Analysis, Data Visualization (Matplotlib, Seaborn)

EXPERIENCE

SPOTFAKE.AI []

June 2024 - May 2025

Chief Product Officer & Full-Stack Developer

- Adelaide, Australia o Optimized application performance, achieving 40% faster load times through code splitting and lazy loading.
- Developed a high-performance CRM system using Next.js and React.js with React Hooks for state management.
- Integrated FastAPI with client systems and conducted comprehensive testing (including stress and gateway testing) to ensure performance, reliability, and security.
- Designed and optimized data pipelines for ML datasets, improving model accuracy and processing speed.

THE UNIVERSITY OF ADELAIDE [♠]

March 2023 - Dec 2024

Adelaide, Australia

RESEARCH & TEACHING ASSISTANT - AI/ML

- Instructed and mentored 200+ students, improving their comprehension and performance in core concepts of Computer Science
- Led and guided a team of tutors, ensuring consistent and accurate grading of assignments and examinations.

GoCrowd.io []

Ian 2022 - Dec 2022

- Frontend Lead Developer Astana, Kazakhstan Led the frontend engineering team, delivering 5+ high-availability features and setting best practices for component design,
- performance, and maintainability.
- Designed and implemented a custom UI system (internal design library) that streamlined frontend development and ensured visual consistency across the platform.
- Collaborated with product designers to transform wireframes into scalable, reusable UI components.
- Implemented comprehensive monitoring and testing protocols including automated health checks, performance benchmarking, and chaos engineering practices to ensure system reliability across distributed environments
- Architected and deployed scalable distributed system infrastructure, supporting thousands of concurrent users.
- · Improved system reliability through fault-tolerant design patterns, circuit breakers, and comprehensive monitoring.

• INDUSTRIAL AND COMMERCIAL BANK OF CHINA [

Feb 2021 - Dec 2021

SOFTWARE ENGINEER

Almaty, Kazakhstan

- Demonstrated expertise in Java, Spring Boot, and Python, contributing to robust software development and system optimisation.
- · Engineered an internal management system for a team of over 50 employees, streamlining operational efficiencies and communication.
- Revolutionised the bank's daily reporting process, automating the workflow and achieving a 340 % improvement in reporting accuracy and efficiency.

EDUCATION

• THE UNIVERSITY OF ADELAIDE

Sep 2022 - Dec 2024

MASTER OF AI AND MACHINE LEARNING

Adelaide, Australia

· Kazakh-British Technical University

Sep 2017 - May 2021

BACHELOR OF ENGINEERING IN COMPUTER SOFTWARE ENGINEERING

Almaty, Kazakhstan

ACADEMIC RESEARCH PROJECTS

MAMBA STOCK

May 2024 - Oct 2024

Australian Institute of Machine Learning

 This study introduces MAMBAStock, a novel approach based on the recently proposed Selective State Space (S6) model, MAMBA. MAMBAStock is designed to swiftly capture stock features and predict prices with competitive accuracy, under Dr. Jinan Zou from Australian Institute of Machine Learning.

· Debiasing Hospital Review

Jan 2023 - Dec 2023

Australian Institute of Machine Learning

 Initiated and currently leading a groundbreaking research project in collaboration with Dr. Weitong Chen, targeting the pervasive issue of gender bias within NLP algorithms. This ambitious endeavor, commenced in March 2023, is dedicated to identifying, analysing, and mitigating gender bias in NLP systems.

REFERENCES

Alikhan Okas (Fellow student)

SWE-SRE for Google Search Google (Mountain View, USA) alikhan.okas@gmail.com

Angus Williamson (Colleague)

CEO SPOTFAKE.AI angus.williamson@spotfake.ai

Adilkhan Kozhakhmetov (Teammate in previous project)

Software Engineer Google (London, UK) adilkhan.kozhakhmetov@gmail.com

Dr. Tim Chen (Supervised me during my role as a Teaching Assistant)

Senior Lecturer The University of Adelaide tim.chen@adelaide.edu.au