Dragos Rotaru

Programmer, aspiring Researcher

Keywords: WebGPU, CRDT, blockchain, Rust, Haskell, Lisp, Deep Learning, NeuroSymbolic AI, Compilers, Programming Language Design, Mathematics, Rust, TypeScript, React, NodeJS, NextJS, Protobuf, GraphQL, WebSockets, PostGres, Redis, AWS, CQRS, Event Sourcing, Monolith, Microservices, Serverless, Hexagonal, Functional, OOP, Open Source

—

Experience

info@dragosrotaru.com • git:dragosrotaru • dragosrotaru.com

I spent the first 7 years of my career exploring as widely as possible, drumming up the self-esteem and courage to admit to myself that I want to build Artificial Intelligence. Now, I want to spend the next 7 years building it with the kindest and brightest. AI is something I have been thinking about since I was a little kid, but I have been concerned about the ethical considerations, and questioned my own ability. We are at a critical moment, and I can't stand to watch from the sidelines. I am spending each day replicating prior work and studying.

Life / Realignment
May 2023 - now • Worldwide

went through a breakup, and traveled all over the world to find myself, visiting over 20 countries. did a 236km trek solo through the himalayas in 9 days. learned to walk and rig highlines over buildings and mountains. built personal projects exploring possibilities with LLMs and trying to find my next step.

Anytype / Software Engineer
October 2022 - May 2023 • Berlin (Remote)

developed desktop client and browser extension for peer 2 peer decentralized open source encrypted knowledge management tool. responsible for a new widget system implementation. promoted refactoring and documentation efforts to improve code quality. researched state of the art technologies across many domains. attempted to redesign the internet from the ground up. implemented new onboarding. fixed bugs and supported users in the public forum. worked with designers and engineers as the only near-native english speaker on the team.

career break ➡

I took a year to ski all over North America, get certified as a wilderness first responder, convert a school bus into a camper and develop real skills. Built a CNC machine to produce a unique modular furniture system. Attempted to build carbon neutral + with upcycled materials. Experimented with all kinds of tools, materials and techniques. developed electrical system. tried with biodiesel production.

Qualio / Fullstack Software / Devops Engineer
September 2020 - August 2021 • San Francisco (Remote)

developed a new customer data migration and onboarding tool to automate the workflow and reduce dependency on engineers in high growth team, using node, react, typescript, aws, s3, postgres. transformed spaghetti monolith architecture built by layers of contractors with very poor technical leadership and implemented CI/CD pipeline application to achieve scalability and high availability. implemented all kinds of technologies in AWS - RDS, SNS, EC2, EKS, ECS, S3, CloudFormation, CDK... you get it.

Huckleberry / Cofounder / CTO
January 2019 - Now • Waterloo (Hybrid)

raised roughly 120k in funding. built ping.buzz using hexagonal, functional domain driven design architecture, rebuilt it again in a simpler style. taught myself lots of engineering concepts. oversaw / inherited a failed overseas outsourced app development project. recovered that project, now we have a working app in the market. recovered from COVID, running out of funding, fighting among founders, partners' personal issues. mentored 12 coop students from waterloo university. Built all kinds of stupid little distractions, extracting datasets, putting together datasets. bu.

Rotaru & Co / Software Contractor / Consultant
April 2017 - Now • Waterloo (Remote)

consulted over 20 clients in many diverse industries. built healthcare billing processing application using computer vision. developed 3 brand new web and mobile applications and contributed to 4 existing ones using react, python, typescript, flow, php, coffeescript, ruby on rails, golang, wordpress, gcp, vercel, aws, websockets, mongo, rabbitmq, postgres, digital ocean, travisCI, C#, Angular, Vue. consulted startup founders. came up with an NFT representing physical objects concept before NFTs were a thing. Organized volunteers at ETHWaterloo. led a software team and hired employees. build aggregated CASL compliant dataset of lawyers in canada and commercialized it. conducted independent research on a wide number of topics, including truth ranking, data fusion. built a QLearning agent. conducted ad campaigns and built multiple websites. made logos and branding. Attended neurips conferences and other industry events. produced data analysis for class action lawsuit. performed an audit for a startup acquisition. digitized property management company of 20+ employees, working as contracted director of IT.

Emrys Analytics / Director of Analytics
September 2016 - March 2017 • Waterloo (Hybrid)

developed underwriting risk models and application for insuring healthcare institutions against cyber breach risk. utilized python, javascript, angular, nodejs, electron, graphql, mongo. aggregated and sanitized datasets. applied k-means clustering and monte-carlo algorithms. aided in design of insurer sponsored incident response playbook. wrote white paper on autonomous vehicle insurance data collection pipeline for Ford Motor Company executive team.

Diebold Nixdorf / Software Architecture R&D Internship
May 2016 - August 2016 • London

developed redis IAM middleware architecture for large scale ATM banking infrastructure. built PoCs and conducted experiments, explored emerging tech including blockchain, webrtc, angular2, http/2, support vector machines for anomalous state detection. supported highest level of decision making with data.

Education

Western University / Comp. Sci. and Mathematics B.Sc.

2014 - 2016, Canada

dropped out due to immaturity + childhood trauma + Western university was an academic disappointment. I am now returning to university to complete my Mathematics degree part time. I would like to get a PhD eventually or at least collaborate with researchers.

Internet + IRL / Every topic

1996 - now, cyber space

I spend most of my waking life reading textbooks, books, papers, wikipedia articles, blogs, tutorials or watching lectures, listening to podcasts, etc. I love learning, have an intense curiosity that goes beyond software and I am chronically learning or making something. I've done clandestine chemistry, ethical hacking, 3d printing, designing and etching PCBs, and refurbished music equipment. designed analog audio and digital synthesizers and launched a hardware company when I was 17 with an entrepreneurship grant. I had a wedding DJ business when I was 16. I worked as a part-time bookkeeper from 14 - 18. I started programming and building from a very young age. I made circuits like H-bridge motor controllers, websites, contributed to a few open source projects, libraries, audio visualization using fast fourier transforms, scrapers to help make decisions, scripts to automate work, all kinds of random crap. That was my education.