

Arlo J. Purcell

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Summary

I have a wide variety of experience and interest within various fields of computing, with experience from point of sale software to machine learning to giant internet companies. I am looking to expand my horizons, solve interesting problems, and build great things.

Skills

Languages: Python, Rust, Elixir, Java, Kotlin, Scala, SQL, Bash, JavaScript, TypeScript, HTML, CSS

Technologies: React, Terraform, AWS, Docker, Kubernetes, Kafka, gRPC, REST, GraphQL, FastAPI, Django

Experience

Senior Software Engineer, Iterative Health – Remote Feb 2023 – Feb 2025

- Built web app for managing patient journeys using a React frontend and a Python FastAPI backend
- Integrated with internal GraphQL service to manage patient journey data
- Created a system for on-demand decomposition of video frames
- Supported the machine learning team by creating new tools
- Made improvements to ML pipeline as needed for new models and use cases
- Helped standardize the ML model life cycle using containerization

Staff Software Engineer, Royal.io – Remote Aug 2022 – Dec 2022

- Created generic meta transaction flow for handling various types of blockchain transactions
- Worked on GraphQL interfaces for payments backend
- Integrated with 3rd party vendors to on ramp and off ramp funds to and from the platform
- Built gRPC endpoints to communicate between microservices

Staff Software Engineer, Decodable – Remote July 2021 – July 2022

- Implemented live streaming data preview on Apache Flink
- Built system to deploy software across multi-tenant kubernetes cluster
- Created system to automatically access stream metadata in Decodable environment
- Helped to build core streaming data platform

Staff Software Engineer, Indeed.com – Austin, TX Aug 2014 – July 2021

- Led an internal incubator team working on an two way marketplace for child care jobs
- Worked on internal system for categorizing and routing sales leads
- Implemented and supported internal tooling for other engineers
- Created internal developer environment system using bash and python scripts around docker
- Maintained and improved internal deployment management webapp using a soy template with JQuery frontend and a Java/Spring/Tomcat backend interfacing with git and Gitlab and Atlassian APIs
- Improved job posting javascript frontend using Closure library and compiler with soy template

Research & Development Engineer, IPsoft – Austin, TX Feb 2013 – Aug 2014

- Led a geographically separated team of developers in the creation of a new artificial intelligence system for human interaction, supported by relational and graph databases
- Managed the project using agile methodologies
- Designed and implemented a first order logic engine for interpreting and then acting upon natural language
- Conceived and realized the system for dynamically creating and executing new business processes
- Fine tuned module for understanding, analyzing, and storing natural language, then generating natural language responses
- Demonstrated and explained the functionality and design of the system to high level executives at enterprise clients

Software Engineer, Google – New York, NY Feb 2012 – Feb 2013

- Developed library for deploying video ads in client applications

- Fixed bugs in Flash, Javascript, iOS, and Android versions of the library
- Designed and implemented an original new version of the Android library
- Created a new version of the library for Samsung smart TV
- Maintained and expanded unit and integration tests
- Managed public releases of the library
- Meticulously documented all code changes and new additions

Associate Applications Engineer, Micros Retail – Solon, OH

Aug 2010 – Mar 2012

- Developed Java point of sale application
- Developed and deployed iOS point of sale application
- Designed and implemented customer specific modifications
- Worked with quality assurance and customers to determine requirements and resolve issues

Education

Oberlin College, BA in Computer Science, Physics

Dec 2007 – Dec 2010