



Michael Barlock

Staff Software Engineer



//Contact



<https://barlock.io>



//About Me

I'm a design curious, full-stack software engineer. I build high-quality, performant, secure, and maintainable cloud-native applications that delight users across industries.

I use continuous delivery to create everything from a cloud platform for AI apps, to blockchain, to managing physical and virtual smart studios for film and television.

I love mentoring and teaching others, barbeque, home automation, and ringing chords with my barbershop quartet.

//Education

University of North Carolina, Chapel Hill

Bachelor of Computer Science
Minor in Entrepreneurship/Music

//Skills

Typescript
Node.js
Javascript
React
Agile
DevOps
MLOps
Kubernetes
Docker
GraphQL
AWS

IBM Cloud
Terraform
GitHub Actions
Travis CI
Kubeflow
Unreal Engine
gRPC
Python
Solidity
Java

//References

Available on Request

//Experience



Staff Software Engineer
SHOWRUNNER

May 2022 - Sep 2023

Designed and built an award winning platform (**NAB Product of the Year**) for high-tech filmmaking that connects physical sets with virtual environments in Unreal Engine. Using native apps for local and remote control, we pioneered production techniques to cut virtual production costs and reduce wasted time on set.

- Lead the engineering org and worked with product and design to release continuously
- Created remote dev and build environments for Unreal Engine
- Built WebRTC platform for real-time video streaming



Architect / Senior Software Engineer
IBM Conveyor AI

Oct 2021 - Jun 2022

Partnered with Watson Core and IBM Research to build a no or low code platform for AI applications. We took learnings from running Watson products and built a horizontally scalable MLOps system that anyone could use.

- Architected an extensible multi-language MLOps platform with gRPC
- Designed and implemented a SOC 2 compliant AWS deployment
- Lead a team of engineers working across organizations using Agile

● **Senior Software Engineer**
IBM Watson AIOps

Jan 2020 - Oct 2021

Productized AI models designed to detect software log anomalies from IBM Research. Designed and built a "Chat Opts" interface using Slack to alert users and allow them to take action.

- Open Sourced Slack bot tools ([IBM/slack-wrench](#)) to simplify bot building and testing
- Built DevOps platform for continuous integration and delivery of multi-team product
- Lead delivery and certification efforts for 30 person product team

● **Slack/IBM Partnership**
IBM Watson

Jul 2019 - Oct 2021

Worked with Slack's partnership team to create unique slack experiences with Watson's AI tech aimed at solving enterprise scale issues. We used design thinking and prototyped experiences for expert identification, organizational insights, and security (data loss protection). I also contributed to Slack's own [developer tools](#) improving performance and developer experience.

● **InnerSource@IBM**
IBM

Jul 2019 - Jun 2022

Championed "[inner sourcing](#)" projects throughout the company and maintained several internal tools. I built and maintained a python Kubernetes [operator framework](#) used by multiple CloudPak teams as well as contributing to and supporting shared build and infrastructure tooling.



Senior Software Engineer
Consensys

Aug 2018 - Jul 2019

Built [Web3Studio](#) to conceive and build things that inspire and enable developers to build novel, unexpected, and innovative products that excite and activate the community to expand blockchain's boundaries.

- Prototyped tamper-resistant, distributed, static websites ([Consensys/web3studio-soy](#))
- Created the [first music NFT](#) that pays back royalties to artists. Custom dApp, ERC712 contract extension deployed to Ethereum main-net.



Senior Software Engineer

LifeOmic | JupiterOne

Feb 2018 - Jul 2018

Worked full-stack on LifeOmic data platform and transitioned to JupiterOne where I lead the front-end team. I maintained a HIPPA compliant CI/CD pipeline and worked across the company to create a shared design system.



Senior Software Engineering Lead

IBM Whitewater

Aug 2015 - Feb 2018

Led an enterprise transformation effort to bring best-of-breed tools to IBMers to improve productivity and happiness. We rolled out and facilitated the adoption of the worlds largest deployments of Slack, GitHub, and TravisCI. We changed how work is done inside IBM.

- Led a multi-disciplinary team in Agile and continuous integration and delivery
- Practiced resilience engineering to ensure tool uptime and reduce alert-fatigue
- Led internal and cross-company learning reviews (post-mortems)
- Spread modern practices with multi-day conference like talks and hackathons
- Taught "Developer Days", a new-hire bootcamp for testing, Agile, and Design Thinking
- Developed Slack bots automate internal processes

● Software Engineer

IBM Storefront

Feb 2015 - Aug 2015

Modernized IBM's [Digital Storefront](#) with a focus on user experience, resilience engineering, and code quality. We continuously delivered code updates via TravisCI to IBM Bluemix (Cloud Foundry).

● Software Engineer

IBM Service Engage

Jul 2013 - Feb 2015

Continuously delivered a full-stack interactive experience (learn, try, buy) for IBM Tivoli's SaaS offerings. We pioneered CI/CD within IBM and deployed to IBM's early cloud offering before it was in GA with fail overs to other providers. I worked closely with our design and analytics teams to iterate towards the best possible user experience.