

ADITYA SHANKAR

FULL-STACK DEVELOPER · BERLIN, GERMANY

me@river.berlin / river.berlin / GitHub / LinkedIn / Blog (RunPod)

Native English and Hindi · German at B2 (aiming for C1 by December)

MAY I INTRODUCE MYSELF?

I am Aditya Shankar, a full-stack developer with around 7 years of experience, based in Berlin. I work with TypeScript and Python across frontend, backend and GPU infrastructure. Most recently I was a software engineer at [RunPod](#), a cloud provider specialised for AI services, where I was one of the first engineers hired and led a team of four. My work centred on fine-tuning and deploying LLMs and vision-language-action models, optimising S3 connections, network storage and Hugging Face model caching, and writing blog articles and documentation.

In my own time I work with robotics and Three.js. I have built inverse-kinematics simulation systems ([robots.river.berlin](#)) and mechanisms for detecting and picking up objects with ArUco markers using LeRobot's SO-101 ([instant.river.berlin](#), [GitHub](#)).

EXPERIENCE

RunPod, Software Engineer

2023–2025

Full time (40 h/week) 2023–2024, then 20 h/week alongside my B.Sc. · [runpod.io](#)

- A cloud provider specialised for AI services, now valued at \$1 billion with over 1 million customers on the platform. I was one of the first engineers hired and led a team of four.
- Fine-tuned and deployed large language models and diffusion models; advised 1,200 organisations and customers on deploying, optimising and productionising GPU-based VM deployments.
- Worked with PyTorch and Hugging Face Transformers as well as native CUDA code to optimise model deployment.
- Optimised S3 connections, network storage and Hugging Face model caching across thousands of machines.
- Wrote numerous blog articles for RunPod ([available here](#)) and large parts of the developer documentation for RunPod's Python library.

Repunzel, Full-Stack Developer

2020–2023

Full time (40 h/week) · [repunzel.com](#)

- Built a submission pipeline letting actors send their portfolios to over 1,000 agencies instantly, considerably improving their chances of being hired.
- Worked across frontend and backend with Svelte, TypeScript, Python, Flask, Postgres and Firebase.
- Developed CI/CD pipelines for a fail-safe, resilient architecture; automated email validation, delivery tracking and test environments.
- Built automated email testing and tracking to aggregate data for actors, reducing 8 hours of manual work per week to a 30-second application.
- Designed architecture for reliable scheduling and cancellation of tasks using RabbitMQ and Python.

TypeCodeLearn, Full-Stack Developer & Tutor

2019–2020

Contract, freelance

- Taught Data Science, Numpy, Pandas, yfinance and Python courses to students to specialize students in automated trading applications.
- Replaced all manual transaction handling with automatically documented, Stripe-based online payments.
- Managed OAuth, email, SMS, SendGrid, Twilio, Stripe and Google Ads.
- Created and maintained Python course content.

Freelance, Software Engineer

2019–2022

Contract · [upwork.com](#)

- Built and maintained websites for over 20 clients.
- Scraped and analysed over 20,000 real-estate transactions to identify optimal deals, reducing weeks of manual work to minutes.

Undergraduate Teaching Assistant, Arizona State University · 2 semesters

PROJECTS

Die-Roboter [robots.river.berlin](#) · [GitHub](#)

Browser-based physics simulation for LeRobot arms. Three.js/enable3d scene, URDF model loading, ammo.js physics, pivot-based control mapping. Written in TypeScript.

SO-101 Pick-and-Place [instant.river.berlin](#) · [GitHub](#)

ArUco detection, homography, MuJoCo, closed-loop inverse kinematics. Partly an AI-assisted port of the thesis code to JavaScript, reviewed and corrected throughout; native serial replaced with WebSerial for direct robot interaction in the browser. Presented at c-base, Berlin.

Thesis [submitted July 2026](#)

Empirical comparison of classical inverse kinematics against a vision-language-action model for robotic pick-and-place on an SO-101 arm.

Also: [build-docker-in-runpod](#), [flask-value-checker](#) (published on PyPI), [leassemblee](#) & [lerobot-training-api](#) (LeRobot tooling), [modulify](#)

OPEN SOURCE & WEB STANDARDS

Contribute to Firefox development, including improving Mozilla documentation (for example, [here](#)), attended CSS Working Group conference to meet with browser developers, contributed to improving accessibility access and standardising form layout within browsers.

HACKATHONS

Winner, Chaos Unicorn Hacks [c-base, Berlin](#) · [October 2025](#) · [Event Link](#)

DWebCamp Hacks [c-base, Berlin](#) · [July 2026](#) · [Event Link](#)

Winner, CodeDevils Annual Hackathon [Arizona State University](#) · [2020](#)

EDUCATION

IU Internationale Hochschule, B.Sc. Applied Artificial Intelligence [2022–2026](#) ([expected](#))

Arizona State University, Software Engineering (coursework) [2018–2020](#)

LANGUAGES & SKILLS

BACKEND

Linux, Python, C, Shell script, Django, Flask, NodeJS, NextJS, JavaScript, TypeScript, PostgreSQL, GCP

DEVOPS

AWS, Docker, Docker-Compose, Cloud Functions, Cloud SQL, Cloudflare, DigitalOcean, Git, pytest, unittest, Mocha.js, Puppeteer

FRONTEND

HTML, CSS, TypeScript, React & React Native, NextJS, Vue, Svelte, Three.js/WebGL

MACHINE LEARNING

PyTorch, TensorFlow, vLLM, CUDA, OpenCV, Hugging Face Transformers