Berrak Nil Boya

UI Engineer /
Software Developer /
Multidisciplinary Audio Artist

PROFESSIONAL SKILLS

JAVASCRIPT/TYPESCRIPT

- Vue.js (6 years of professional experience)

- React.js & Redux (9+ years of professional work experience)

- Next.js (7 years of work experience for clients) and Nuxt

- Hands-on experience using, creating and scaling GraphQL and REST APIs

- Libraries: Three.js, Tone.js, p5.js, D3.js

- Functional and Object-Oriented Programming Principles

- Test-Driven Development with Jest

- Node.js

HTML5/CSS3

- Responsive Design and Development

- Style Guide-Driven Development and Design Systems

- CSS Grid, Flexbox, CSS Modules CSS-in-JS, BEM, SMACSS, Atomic Design

- Semantic Markup, Accessibility best practices

CONTACT

berraknil@gmail.com
berraknil.github.io

PROFILE

I am a Berlin based UI engineer, a software developer, and a multidisciplinary audio artist, who loves to work at the intersection of arts and technology.

After a few decades-long career in music, academia, and video games, these days I prefer to build user-friendly and accessible web applications, and create online learning materials and interactive artworks, by using code, original sound design and music.

EXPERIENCE

POSTSTATION UI - One Variable GmbH (2024 - 2025)

Working on creating a frontend for the Poststation application, making API design decisions together with the product creator/owner, as the solo web developer on the project. Using Vue.js/Typescript for frontend and Node.js for communication with the REST API built on top of Rust.

PROTOTYPE FUND GRANTEE (2024 - 2025)

My browser extension BrowserEQ is awarded a grant from Prototype Fund (supported by the German government) to upgrade it to the second version, while using modernized web technologies. It was chosen as one of the 25 projects to be supported among 328 applicants, and during the grant period, I worked on both upgrading the UI and implementing new features.

HUMAN VIOLINS XR (MARCH 2024 - MAY 2024)

Working as a Technical Audio Artist for the VR Franchise Human Violins, which will be screened in Cannes XR 2024. Responsible for all Unreal Engine 5 technical audio development. Designing audio systems, developing blueprints, creating audio event hooks to the sequencer and gameplay instance, in addition to implementing all sound assets created by the lead sound designer, according to their needs and instructions. Also designing all Unreal Engine 5 mixing pipeline, including Binaural audio and Resonance Plug-in implementation.

K5 FACTORY (SEPTEMBER 2023 – NOVEMBER 2023)

Working on the official Oktoberfest VR Game supported by the Bayern Government, as a technical sound designer. Working with Unity, FMOD, Steam Audio and Google Resonance stack, to be shipped with Meta Quest 2 or later. Creating, testing and implementing audio solutions, sound effects and music to be used in social VR.

ZA/UM STUDIO (MAY 2022 – JUNE 2023)

As the first permanent audio person to have been recruited by the studio, I was the audio lead for two unannounced projects (one in Unity + Wwise and another in Unreal Engine 5), I also took part in establishing a new audio department for the company, implemented and documented best practices in cross-collaborative teams from an audio context, and served as the company's main audio systems designer, and made crucial technical and aesthetic decisions where needed. I also took part in hiring new personnel, writing audio design documents, sharing game audio processes with other departments for transparency and educational purposes.

Berrak Nil Boya

UI Engineer /
Software Developer /
Multidisciplinary Audio Artist

PROFESSIONAL SKILLS

TOOLING & WORKFLOW

- Git / Perforce
- Webpack
- npm/yarn as a task runner
- Design and Prototyping with tools such as Figma, Invision, Canva
- Debugging and profiling with Browser Dev Tools

DOCUMENTATION AND PRODUCTION

Due to my academic background and also working as a self-directed and self-motivated artist and a freelancer for years, I am very meticulous about documenting my processes, making sure cross-disciplinary collaboration and onboarding processes are accessible to all involved.

OTHER TECHNOLOGIES

- Fluent programming and scripting with Python in different contexts, game development and web scraping
- Unreal Engine audio programming using C++ and Blueprints, in addition to gameplay and VFX programming
- C# scripting in Unity

LANGUAGE SKILLS

- English: Native level fluency, Toefl IBT score 114 (2012)
- German: B2 (Goethe-Zertifikat, 2021)
- Turkish: Native fluency

PURE POETRY (JULY 2023 – …) FOUNDER / OWNER

Creating audio focused software solutions, like UI based editor tools for audio pipeline in Unreal Engine 5, extending widely available middleware solutions such as AudioKinetic Wwise, and more.

Our first Unreal Engine 5 Audio/Code Plugin is now on Epic Marketplace

OAK NATIONAL ACADEMY (NOVEMBER 2021 – APRIL 2022)

As a frontend engineer I worked on improving the already available online classroom and teachers hub implementation, in close collaboration with design and UX teams. I also took part in implementing new features such as timed quizzes, and updating and refactoring the design system components for the government funded UK organization.

"TIDES, OR AN INEVITABLE UNFOLDING" (AUGUST 2021 – JUNE 2022)

Collaborated with sound artist Pedro Oliveira on a web-based piece for ZKM Karlsruhe, responsible for web audio conceptualization and implementation.

EDUCATION INNOVATION LAB (JULY 2021 – OCTOBER 2021)

Worked on the public workshop pages for the Digital Sparks app, using the latest React.js features and modern CSS techniques.

DRAKNEK ORG (JANUARY 2021 – MARCH 2021)

Re-design and development of the Draknek Limited website.

PRATER DIGITAL (AUGUST 2020 – DECEMBER 2020)

Worked as the creative & technical director for the cultural office of Berlin, and designed and developed a WebVR room using Mozilla Hubs.

APPLE INC. (FEBRUARY 2019 – MARCH 2020)

Frontend engineer, responsible for rewriting several React.js components in Vue.js, in addition to working closely with the design and UX team on implementing new features for the SwiftUI Tutorials website.

GATSBY INC. (JULY 2018 – SEPTEMBER 2018)

Design and development of several new pages for the showcase section of the Gatsby v2 website.

TRAVIS CI GMBH (DECEMBER 2017 – APRIL 2018)

Worked on the Travis web application as a frontend developer.

Berrak Nil Boya

UI Engineer /
Software Developer /
Multidisciplinary Audio Artist

EDUCATION

MIMAR SINAN FINE ARTS UNIVERSITY INSTITUTE OF SOCIAL SCIENCES
- **B.A. in Musicology with a focus on cognitive musicology and film/video game music.**
- **M.A. (unfinished) on role of expectation in film/video game music.**

MIMAR SINAN FINE ARTS UNIVERSITY STATE CONSERVATORY (1996-2003)
- Eight years of classical music education from middle-school to university level, with a focus on Classical Double Bass, Conservatory diploma.

SOUNDMINER INC. (MAY 2017 – MAY 2018)

Created the web application version of their audio file management software using React/Redux.

TRINT (NOVEMBER 2016 – FEBRUARY 2017)

Worked as a React consultant, built components with React and Sass to be used in the new UI of the Trint web app.

GROUPBY INC (SEPTEMBER 2016 – DECEMBER 2016)

Worked as a Frontend developer/consultant to create and implement responsive page designs for mobile devices.

COMPOSER AND SOUND DESIGNER | WEE TAPS (2015-2016)

Created the sound design and music for the new Wee Taps game jingles.

COMPOSER, SOUND DESIGNER, IMPLEMENTER | LAVA FEVER (2014-2015)

Created and implemented all music and sound effects for the game. Used FMOD as the audio middleware and worked with Unity.

FREELANCE FRONTEND WEB DEVELOPER (2014-…)

Creating websites for clients using the latest web technologies and best practices.
.
T.A. AND LECTURER IN HUMANITIES COURSES | SABANCI UNIVERSITY (2011-2016)

Taught courses titled Major Works of Classical Music and Major Works of 20th Century Music.

LECTURER IN HUMANITIES COURSES | MIMAR SINAN FINE ARTS UNIVERSITY (2011-2012)

Taught courses titled Opera History, Contemporary Music and Film Music.