Croatia, Zagreb
durinec.nikola@gmail.com
LinkedIn Profile
GitHub Profile
Portfolio

# **NIKOLA ĐURINEC**

Unity Programmer with 9 years of experience

#### SKILLS

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Excellent knowledge of C# programming language.

Excellent in work with tools: Unity, Git

Other technologies/languages: ECS, MLAPI, Netcode, Photon Bolt, Unreal Engine, Perforce, C++, C, Beef, HTML, CSS, PHP, JS
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### **EXPERIENCE**

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Toca Boca — Senior Unity Engineer
— Toca Boca Days (iOS, Android)
AUGUST 2023 — JULY 2024
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- Conducted monthly comprehensive memory and CPU analyses for both server and client environments
- Developed and implemented a server asset stripping process to significantly reduce server memory consumption, enabling the operation of multiple instances on a single server
- Improved performance by cleaning up massive garbage collection (GC) allocations occurring per frame, across both server and client environments
- Designed and implemented a Level of Detail (LOD) system for player animations to minimize animation overhead for distant players
- Optimized various game systems using Unity's Jobs System and Burst Compiler to enhance overall performance
- Implemented custom Roslyn analyzers for various gameplay and network code rules

#### Binx Games — Lead Programmer

MAY 2018 - PRESENT

- Led a team of four developers and provided mentorship to junior team members
- Participated in technical interviews, established onboarding tasks, and created documentation to facilitate the integration of new team members
- **Developed authoritative game server functionalities**, including inventory management, character movement, and abilities

- Implemented custom bootstrapping and game life-cycle logic to streamline game development processes
- **Created a first-person animator** supporting individual hand, head, and equipped item animations based on character states, utilizing an automated animation import tool
- Developed a versatile UI wheel selector for various in-game systems such as building, emote display, or weapon selection
- Designed and implemented a UI node-based skill dependency tree with user experience enhancements like zoom and panning functionality
- Enabled mod support for community-generated content, integrating platforms like Steam Workshop for loading custom scripts and assets
- **Implemented an in-game console** for streamlined debugging and testing, incorporating custom commands
- Developed a hierarchical UI canvas tree with efficient state events for optimized rendering performance
- Implemented reliable entity events (RPCs) and addressables support for Photon Bolt networking framework
- Utilized IL-Code generation techniques to optimize garbage collection and enhance performance for Unity Netcode for GameObjects
- Worked on multiple custom editor tools, including a scene preset loader and prefab painter, to streamline development workflows

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Rolla — Unity Developer
— Rolla World
MAY 2022 - JULY 2022
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- **Developed and implemented a bicycle collision avoidance system** to enhance game immersion
- Created a custom video streaming player for UWP platform

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Binx Interactive — Unity Developer
— I Hate Running Backwards (Steam, XBox One, PlayStation 4, Nintendo Switch)
NOVEMBER 2016 - MAY 2018
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- Worked on all aspects of the game, including UI and menus, tutorials, AI behavior, weapons, custom asset bundle loader, chunked level loading, localization, achievements, input system, and platform-based integrations like Steam API
- Ported the game to PlayStation 4 and Nintendo Switch platforms, ensuring compatibility and optimizing performance

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- Monster Loops (iOS)
APRIL 2016 - NOVEMBER 2016
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• Worked on all aspects of the game, including UI and menus, tutorials, gameplay, in-game store and ad integration

# **Exordium Games** — Unity Developer

NOVEMBER 2016 - MAY 2018

- Zero Reflex (iOS, Android)
  - Handled the development of the in-game shop and ad integration
  - Worked on polishing of game levels and menus
- Bear With Me Episode One (Steam)
  - **Developed and enhanced puzzles**, fixed bugs, and customized the Adventure Creator plugin to meet project requirements

## **EDUCATION**

**University of Applied Sciences, Zagreb** — Bachelor's degree in Information Technology

2011 - 2015

**Technical School Kutina** — Computer Technician

2007 - 2011