

Nikola Istvanic

BIOGRAPHICAL

Name: Nikola Istvanic

Home Address: 7906 Wildcat Pass, Austin TX 78757

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E-Mail Address: istvanic.nikola@gmail.com

Citizenship: United States, Canada

EDUCATION

GRADUATE:

Georgia Institute of Technology Atlanta, GA	M.S. Computer Science, 2023 College of Computing Highest Honors	8/2020-5/2023
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UNDERGRADUATE:

Georgia Institute of Technology Atlanta, GA	B.S. Computer Science, 2018 College of Computing Highest Honors	8/2015-12/2018
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WORK EXPERIENCE

Amazon Lab126 Austin, TX	Embedded Software Engineer II	5/2022-Present
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Designed C APIs for access-controlled key-value storage released in public SDK.
Implemented and documented ReactNative API binding on several C++ OS components.
Designed and created seamless mechanism for application time zone, language, and theming updates. Onboarded, interviewed, and trained team's new hires and interns.
Maintain an active mentorship role.

Amazon Lab126 Austin, TX	Embedded Software Engineer I	10/2020-5/2022
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Implemented publish/subscribe C API in firmware of embedded Linux and RTOS devices. Developed C++ APIs for access-controlled key-value storage for operating system. Developed application internationalization and asset resolution API. Optimized weight-based file ranking algorithm, improving performance by 6x.

Lawrence Livermore National Laboratory Software Engineer
Livermore, CA

8/2019-5/2020

Developed camera data capture and streaming code for embedded C++ space flight simulation software. Implemented multithreaded producer-consumer pattern for capturing and processing of image data. Improved modularity and cache usage of linear algebra library, reducing runtime by 50%.

Cisco Systems
San Jose, CA

Software Engineer Intern

5/2018-8/2018

Added concurrency handling for official Linux device driver in in distributed storage system. Balanced interrupt spread to increase processor affinity and improve cache utilization. Improved driver performance by 225% over production code.

JP Morgan Chase & Co.
Columbus, OH

Technology Analyst Intern

6/2017-8/2017

Developed router configuration file updating automation tool. Eliminated manual process of upgrading routers with Python script. Configured Cisco switches and routers to connect wired devices to company intranet.

PROFESSIONAL ACTIVITIES

RESEARCH POSITIONS:

Space Systems Design Lab
Atlanta, GA

Research Assistant

8/2017-5/2018

Developed software for fully autonomous satellite communications ground station. Created Python script to control antenna movement to track satellite movement. Designed scheduling algorithm to maximize number of satellites communicated with.

Center for Relativistic Astrophysics Research Assistant
Atlanta, GA

1/2017-5/2017

Created firmware and embedded software for temperature-controlled telescope. Developed C++ API to convert raw sensor resistance readings to temperature values. Implemented Python serial console to display temperature output from sensors.

HOBBIES AND INTERESTS

Traveling, biking, hiking, classical guitar, clarinet
Fluent in Serbo-Croatian, advanced in Russian