

# NATHANIEL ALLEN PAYNE JR.

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## SUMMARY

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Highly analytical software developer with 5 years of experience leveraging Java and SQL to solve complex problems in a dynamic environment. Skilled at creating robust and detailed design documentation, oral and written communication of complex problems, and building readable and efficient code for long-term usage.

## WORK EXPERIENCE

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### Java Developer - UZURV

March 2022 - Present

- Developed a client of an in-house path finding API to improve driver efficiency by presenting highly efficient bundles of rides to drivers, approximately doubling driver efficiency.
- Redesigned the driver pairing algorithm to account for multi-ride bundles and to track/leverage several new data points associated with their introduction.
- Integrated with Google Maps to determine a driver's ability to make it to given locations on-time, thus decreasing the overall amount of driver late arrivals.
- Revised data model to allow riders access to their data that had been uploaded across multiple different clients after authenticating their identity.
- Designed and implemented a weighting system to the pairing algorithm to ensure contract compliance via the correct allocation of drivers to markets.
- Leveraged Bandwidth to send reminders to riders via text messages the day before they have a scheduled ride to request confirmation, in order to help alleviate riders no showing to their own rides.
- Integrated with Lyft to allow rides to be dispatched to Lyft if UZURV drivers were unavailable or uninterested in the ride, to help ensure ride fulfillment.
- Mentored back-end interns by providing overviews of key system components, breaking up work into manageable chunks, and meeting to get progress reports and provide guidance.

### Java Intern - UZURV

May 2020 - March 2022

- Designed and implemented an automatic tax form generator that runs annually, compiling each driver's taxable earnings into a completed 1099 tax form and sending it to the driver, thereby saving hundreds of hours of manual data entry every year.
- Standardized and created documentation for API's to ensure proper client configurations and efficient on-boarding for new partners.
- Spearheaded fixing and stabilizing test suites in order to assist the DevOps team with implementing CI/CD.
- Upgraded an internal review process of fare calculations by providing the ability to configure the review triggers, thus allowing fine tuning of the system and preventing false positives.

## EDUCATION

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### Virginia Commonwealth University

Bachelor of Science in Computer Science

Aug 2018 - Dec 2022