Mark Lavrentyev

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Relevant Coursework

Acc. Intro to CS • Intro to Software Eng. • Logic for Systems (Formal Methods) • Deep Learning • Programming Languages • Abstract Algebra • Prescriptive Analytics • Probabilistic Methods in CS

** - denotes in-progress course*

Programming Languages

Python • Java • C# • Racket • Haskell • SQL • TypeScript • HTML/CSS • Alloy

Technologies

Heroku • React • jQuery • TensorFlow • Django • Oracle SQL • PostgreSQL • Linux • GitHub Actions

Other Skills

English (native) • Russian (native) • Git • Tableau • LaTeX

Awards

AP Scholar with Distinction • National Merit Finalist

Social Media

github.com/MLavrentyev

linkedin.com/in/mlavrentyev

@mark_lavrentyev

lavrema@outlook.com
mark_lavrentyev@brown.edu

Education

Brown University, Providence, RI — Sep. 2018 - present

- Anticipated concentration: Sc.B., Mathematics - Computer Science
- GPA: 3.93/4.00

Work Experience

Microsoft: *Software Engineering Intern* — Summer 2020

- Delivered a new admin DLP feature for the Power Platform admin center
- Worked full-stack in C# & Typescript/React to create and validate the feature

Fidelity Investments: *Data Engineering Intern* — Summer 2019

- Developed package to parse potential financial crime alerts for data analytics
- Worked in Oracle SQL developing views for risk case management team

Citizens Campaign for the Environment: *Canvasser* — Summer 2018

- Built public support for passing CT's first state water management plan
- Fundraised $6,500+ and generated 250+ letters to state legislators

Air Force Research Lab: *Wright Scholar* — Summer 2017

- Developed MOSSE-based fast image annotation program for machine learning research
- Optimized face-detection program running on Jetson TX2

Projects & Contributions

Vehicle Routing Solver (github.com/MLavrentyev/vehicle-routing)

- Solver for finding least-cost routing to customers while respecting truck capacities

Forge (github.com/tnelson/Forge)

- Alloy-like formal methods language. Language development & documentation.
- Added support for BDD solvers, custom SAT solvers, and integers.

Purchase Request Manager (github.com/MLavrentyev/TeamManager)

- Application for teams to manage purchase requests through centralized site

Other projects can be found at github.com/MLavrentyev

Activities

Teaching Assistant — Sep. 2019 - present

- Head TA - Logic for Systems (Spring 2020)
- TA - Programming Languages (Fall 2020), Intro Linguistics (Fall 2019)

Brown Formula SAE Racing Team — Sep. 2018 - present

- Aided in designing, building, and racing a formula-style race car
- Led engine tuning effort through engine & chassis dyno testing

FIRST Robotics Competition Team 4557 — Sep. 2014 - May 2018

- Programming team lead (2017), drive team member (2016-2018).
- Developed vision & motion profiling code for auto-alignment and precise actuation