# RYTIS KAZIMIERAS JONYNAS

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## EDUCATION

**Yale-NUS College**, Bachelor of Science with Honours _Singapore, SG_
Major in Mathematical, Computational and Statistical Sciences _Aug 2017 - May 2022_

- <u>Notable Coursework:</u> Data Structures and Algorithms; Parallel and Concurrent Programming; Programming Language Design and Implementation; Quantum Information and Computation; Software Engineering.
- Peer tutor for Software Engineering (Fall 2020 and 2021) and C: Programming Language (Fall 2021) courses.
- Thesis: Information Density Maximization in Artificial DNA storage systems.

**Harvard University**, Visiting Undergraduate Student _Jan 2020 - May 2020_

- <u>Notable Coursework:</u> Biological & Artificial Intelligence, Graph Theory and Combinatorics, Introduction to Machine Learning (MIT).

## EXPERIENCE

**Backend Intern (Developer tools)** _Remote / Singapore, SG_
Ahrefs _June 2021 - July 2021_
Technologies: OCaml.

- Improved issue visibility, prioritization, and developer response times through use of a graph-like structure to automatically capture dependency relationships between incident tickets and organize them by root cause.
- Implemented customization options for a staging environment of an in-house incident tracking tool, thus enabling more convenient and exhaustive local and remote testing.

**Software Engineering Intern (Routing Team)** _Vilnius, LT_
Trafi _Feb 2021 - May 2021_
Technologies: C#, Visual Studio.

- Improved regression testing of microservices by building a routing infrastructure integration testing library.
- Reduced garbage collection load and latency of whole system by splitting a data preparation module into a separate cron-like service.

## PROJECTS

**Web app for NLP analysis of a Reddit forum on financial bets** (Code)
Technologies: Flask, MongoDB, Google Cloud App Engine, React, Sentry SDK.

- Designed and optimized system architecture for a web app analyzing discussion trends from >200 posts and ~27k comments daily from r/WallStreetBets on Reddit. The website attracted >500 users and >1100 visits.
- Deployed the web app on Google Cloud AppEngine as multiple microservices (backend and NLP engine, reactive frontend app) with automatic real time error tracking (Sentry SDK) and extensive logging.

## SKILLS

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| **Programming languages** | C#, Python, OCaml, Java, Scala, C++, R, Matlab, Coq. |
| **Web Dev and Databases** | Flask, Firebase, MongoDB, PostgreSQL. |
| **Technologies** | Linux, Bash, Docker, Git, CI/CD, Tensorflow, OpenCV, Google Cloud (VMs, PaS, serverless), SSH, WebSockets, Android. |

## MISCELLANEOUS

- AI course instructor at InspiritAI (May 2021 - present).
- Citadel & CorrelationOne Terminal competition: Harvard/MIT Edition 2020 - 1st Runner-up of 40 teams (Code).
- Attended PLMW@POPL2021 (Programming Language Mentorship Workshop at Principles of Programming Languages.