

Curriculum Vitae

Iurea Marius

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Personal Profile

Dedicated, self-motivated, and passionate software engineer, looking to fill a position where I can grow and take on new challenges. I am a fast learner and able to adapt to different work environments. I am confident that if given the opportunity, I can be a useful part of your software engineering team. (Up-to-date CV)

Technical Skills

- **Languages** — JavaScript, C, C++, C#, Python, HTML
- **Frameworks/Libraries** — Node.js, Express.js, ASP.NET, JQuery, Django
- **Tools** — Git, Unity, Visual Studio, Vim, Nuget, NPM, ESLint

Experience

- **Bitdefender** — 01/06/2020 → current
- **Job Title:** — Junior Software Engineer
- **Department:** — Cyber Threat Intelligence Lab

Project Overview:

The application is an internally used tool that deals with the analysis of logs created by other Bitdefender products: it filters out irrelevant events and gives the user tools to analyze the chain of events that led up to a malware detection event.

Technologies used: Node.js, Express.js, JQuery, Bootstrap, AJAX, JSON

Responsibilities:

- went through a 2-week learning program where I learned how to use Node.js and Express.js where I was familiarized the most commonly used Node packages
- refactored an existing codebase for a log processing and analysis utility
- modularized the application and made it comply with the code style guide
- rebuilt the complex filtering and preprocessing of the JSON files.
- substantially optimizing the filtering and lowered general load times across the application by rewriting the glob filtering modules and modules modeling the relations between events and detections
- took initiative in implementing lazy loading in order to decrease the size of the requests sent and received, drastically decreasing server and client load
- added support for a different type of log file
- implemented automatic detection of log file type and OS

Projects

- **RedditFeud** — Webapp built using Django, hosted on AWS ([Link](#))

Motivation:

As an avid user of Reddit, I wanted to write a webapp that would interface with the python Reddit API and since python seemed like an easy to use language I decided to learn Django. Another important part of this project that I tried to give special attention was going through the process of buying a domain and hosting because I had no prior experience doing it.

Summary:

This webapp queries the python Reddit API and stores the most popular posts and comments submitted today in an SQLite database, then when a user requests a quiz it pulls 10 randomly chosen questions from the database and uses the template engine to create the webpage.

Skills Acquired:

- The ability to plan out a bigger project and go through the steps required to turn an idea into a user faced product.
- Understanding of how a web framework deals with receiving, parsing and responding to HTTP requests using the MVC design pattern.
- Knowledge of how to use an API to gather and serialize data in order to more easily retrieve it when it is requested by the user. Also got experience in finding my way through documentation.
- Processing of JSON files was a key part since the API had a pretty restrictive rate limiter I had to use a third party API which compiled and archived bigger chunks of posts and comments.
- Experience using a template engine to dynamically fill out webpages.
- Ability to use CSS Grid to resize and scale the content of the webpage for different devices, JQuery was used for user interaction.
- Basic storage of posts and comments in an SQLite database to make adding them to the templates easier.
- Usage of git in order to manage different versions of the project, sync up on multiple devices, and keep a ledger of changes I made in order to more easily revert them.
- The process of deploying my project to AWS using Nginx and setting up daily cronjobs to keep the database updated with new content daily.

- **Unpopular Opinions** — Website built in ASP.NET with a Bootstrap front end for FiiPractic full-stack ASP.NET courses ([Link](#))

Motivation:

Nearing the end of these courses we were tasked with putting our newly acquired knowledge to use, we were told to build whatever we wanted as long as we used everything we were taught in those 5 weeks.

Summary:

Message board website that stores user's posts and comments, it has a reply, up and downvote systems for sorting content, authentication with a Google account, and API support. It was one of the three winning projects.

Skills Acquired:

- Learning a framework in a relatively short amount of time and putting it to use under a tight deadline.

- First-hand experience with the C# programming language, the only prior experience was a little bit of scripting for a game using Unity.
- Creating tables and modeling relations between them in the database using the code first approach in Entity Framework in order to create one-to-one, one-to-many, and many-to-many relationships.
- Razor template engine to fill out templates on demand to be shown to the user.
- Further developed my understanding of the MVC design pattern and routing.
- Got more hands-on experience with the different types of HTTP requests and error codes.
- Developed an API and used it in order to dynamically send requests and receive JSON files using AJAX and JQuery.
- Used Microsoft SQL Server.
- Understood how model binding retrieves data from form fields, query strings and route data, converting string data to .NET types.
- Authenticating users using their Google account.
- Learned how to use LINQ in order to more easily retrieve objects from the database in formats that are easy to manipulate.
- Used Bootstrap to quickly develop the frontend of the website.
- Learned how to use data annotations in order to validate user input and return appropriate error messages.

Education

- **Currently getting a bachelor's degree at the Faculty of Computer Science Iasi(second year student)** — 8.5/10 Grade Average

Got into the university with a 9.85 grade on the admission test.

Throughout high school, I participated in the informatics olympiad and was interested in competitive programming.

At the end of 12th grade participated in Oracle SQL courses.

Favourite Courses:

-Computer Architecture and Operating System was my favourite course in the first semester, mostly because I found it to be a lot more difficult than the other subjects. It was something I hadn't worked with before and it sparked my interest in how computers work on a lower level.

-Object Oriented Programming was my favourite course in the second semester, because when compared with other courses, it really felt useful and I could see how and why I would use what I was learning.

- **Winning project in FIIPractic full-stack .Net courses** — The technologies we used were ASP.NET, Microsoft SQL Server, HTML, CSS, Bootstrap, Javascript, JQuery, AJAX, and Git.