

1. Zašto si se prijavila baš za ovu praksu?

Ever since my third year of studies – that is, last year – when I had a Cyber Security course at university, I became quite interested in the field. I realized that the knowledge I gained was a good foundation but still basic. I'd like to build on that further. and cyber security is essential in order to truly be considered a good web developer. Since my current focus is on web and mobile development, and that's where I work on most of my projects — both at university and in my free time — I feel like this area is the missing piece of the puzzle, so to speak, for me to feel complete in what I do.

I've invested a lot of time in learning algorithms and data structures, object-oriented programming, frontend design, and I've studied and worked extensively with both SQL and NoSQL databases. I also completed two significant projects in cloud programming (i also worked with cloud computing - i have 2 import projects in that area). The only major area that remains — and that is strongly connected to web development — is cyber security. It's also a field I find truly fascinating. so i feel that is the field where i can grow and develop the most and it aligns with my current interest.

2nd reason: Also, it's not easy to learn everything on your own — there aren't many easily accessible experts in this field, and there aren't many internship opportunities where mentors would dedicate time to this specific area. So, all in all, when I saw this opportunity, it felt like a very unique and rare chance for growth

3th reason: Since this is my final year at university, I believe it's the ideal time to gain some additional experience, so that right after finishing my studies, I will already have that extra experience.

4th: I also hope to make connections for future professional collaboration through the British Council, or at the very least, to have a strong reference from a respected organization — a reference backed by real knowledge and experience.

2. Šta je tvoj cilj ove prakse?

My goal during this internship is to gain hands-on experience working on security-related projects — whether that involves web and mobile application development, cloud computing, telecommunications, or another industry. I find finance and banking particularly interesting, as I often work with databases in my free time, and databases are the core of any banking system. I'm curious about the potential attacks on such systems.

I want to apply the theoretical knowledge I've gained, expand it further, and gain practical experience. I also hope to make connections for future professional

collaboration through the British Council, or at the very least, to have a strong reference from a respected organization — a reference backed by real knowledge and experience.

""I'm interested in this field and I want to learn more about it in depth, primarily to complement my knowledge of web development — so that I can build not only well-designed and efficiently functioning applications, but also secure ones. Additionally, I want to gain general knowledge of cyber security, as it is important across many industries.""

3. Šta te najviše zanima u ovoj oblasti?

1st: I'm especially interested in how vulnerabilities in web applications are discovered and exploited, and how to protect against them — like preventing cross-site scripting, SQL injection, or insecure authentication. Since my focus is on web and mobile development, I feel it's essential to understand how to build applications that are not only functional and well-designed, but also secure by design. I'm also curious about threat modeling and how security is integrated into the development lifecycle, especially in DevSecOps.

The application of cybersecurity in web development and user-facing applications and platforms and how security is built into the development process itself.

2nd: I'm also interested in the application of cyber security in cloud computing. I recently read that, as more and more services and infrastructure move to the cloud, attacks on cloud environments increased by 75% last year. That's why it's essential to implement cloud-specific security strategies.

3th: Another important issue is artificial intelligence, which can act both as an attacker and as a defense mechanism against cyber security threats. The misuse of privacy and users' personal data in modern AI applications, deepfake scams, and advanced AI-driven phishing are all highly relevant topics today — and they're becoming even more relevant over time. These concerns aren't isolated from any field; whatever you're developing, if it's used by even a slightly wider group of users, you need to implement proper security measures.

4. Koje veštine bi želela da razviješ?

I want to develop concrete technical skills in the field of cyber security — such as how to analyze and identify system vulnerabilities, how to implement security measures in web and cloud applications, and how to use security tools in practice. I also want to learn more about the security standards and procedures applied in companies. In addition to technical knowledge, I would like to improve my teamwork, communication

in a professional environment, and reporting and documentation skills — because these are also essential in the IT industry.

5. Gde se vidiš za 3 do 5 godina?

In 3 to 5 years, I see myself as an experienced software engineer, with significant experience in developing full-stack web and mobile user applications, either independently or as part of a team. In other words, my goal is to grow from a junior to a senior — or at least a mid-level — developer within the next five years, which I believe is a realistic timeframe.

But I don't know — maybe my path will lead me in a different direction, toward focusing more on AI, cloud computing, or databases. These are all fields that interest me and in which I already have some knowledge and experience.

Software engineering is a broad and diverse field. I have my own preferences, but I believe that wherever the path leads me to specialize, it will have its own purpose — especially since I'm interested in many different areas within it." "But I would like the beginning of my specialization in a specific area to start and develop during the next three to five years.

6. Opiši sebe (mane/vrline)

impatient worry-prone insecure

reliable dilligent systematic

I would describe myself as persistent, systematic, and someone with technical breadth — I have experience and knowledge in multiple areas, from full-stack development and working with databases to cloud services, which helps me see the bigger picture when it comes to software development.

Sometimes I'm afraid to ask someone more experienced when I don't understand something, because I worry it might make me look foolish. That insecurity can only be overcome through experience — experience and work, and gaining knowledge. Since I don't have experience working in a corporate team, I think it's normal to feel nervous at first, especially in front of much more experienced colleagues.

7. Timski rad

Yes, I have worked in team environments during university group projects. I have been part of teams where I learned more from others (more experienced colleagues), and teams where others learned more from me, so I have experience on both sides. (as a leader and as a listener). At the beginning of my studies, I was more of a team member

who learned from others, but later, in my third and fourth year, I became one of the main contributors — someone others turn to for help and learn from.

I enjoy teamwork and believe I adapt well. I'm always willing to help others, and even when I manage to solve a problem on my own — which happens most of the time — it feels reassuring to know I can always ask someone for help if needed or at least discuss the issue it can also help. But working independently also has its own benefits, you can organize your own time and priorities how it suits you.

8. Vreme, organizacija, komunikacija

I believe I'm good at time management — I enjoy making plans and setting priorities, and I've been doing that since I started elementary school. At university, we worked on many projects using Scrum methodology, with organized sprints, Trello boards, and weekly deadlines for tasks to be completed within 7-day cycles. So I think I've also developed certain organizational skills through that experience.

I also organized my own working schedule during the internship I'm currently completing, as my mentor didn't intervene much. And I managed to complete everything on time. Even a bit ahead of the deadline.

I believe I have very good communication skills, and I was always the one responsible in the teams for organizing meetings, retrospectives, planning the next steps, and similar tasks. In the fourth year of my studies, we have a course called Written and Verbal Communication, where a strong emphasis is placed on writing style, clarity, conciseness, precision, and proper citation of sources and references when creating technical documentation. I'm currently working on documentation for my project on laptop price prediction, which I'm about to complete. We've also written documentation for many other projects, so I consider myself experienced in this area, although there's always room for improvement.

I was also a volunteer in environmental organizations, where I held workshops and led projects. In those roles, I participated in teamwork as a team leader. Although this experience isn't directly related to technology, I believe it helped me develop valuable communication and organizational skills.

9. Stres

I think I've learned how to handle stressful situations and tight deadlines, because for the past three and a half years at university, we've constantly had multiple projects, exams, midterms, and checkpoints — all happening at the same time. Deadlines are often close together, and there's always a lot of work. The only real solution is to start early, but no matter what, there's always something with too little time, and you just

have to push through the pressure. I feel like that kind of intensity has become normal for me now, and I don't even notice it anymore. Sometimes you even work more efficiently and better under stress.

10. Kako se informišeš?

I stay informed about the latest developments in technology and cybersecurity through online sources. At university, we currently have assignments and seminars related to this topic, so I actively follow the OWASP blog. I also use websites like ShareFile and enjoy watching the YouTube channel Darknet Diaries, where I learn about hacker groups around the world trying — and sometimes succeeding — to breach major tech companies. It shows me how even the biggest organizations can be vulnerable and reminds me that cybersecurity is a field where there is always room to grow and improve. And sometimes, that kind of information simply reaches me through other news articles I read.

11. Kako si saznala za ovaj program?

I found out about this program through the Infostud website while I was looking for internship opportunities or an entry-level job as a student. I also came across the post on social media, primarily on Facebook.

12. Mentor

From my mentor, I expect support and constructive feedback, and I hope that the working and communication atmosphere will be relaxed enough for me to feel comfortable asking questions, even if they seem basic. I also want to clearly understand the significance of what I'm learning and the practical application of the projects I'm working on.

13. Dostupnost i sati koje mozes posvetiti radu i druge obaveze

I'm expected to graduate in October, so after that I won't have any additional obligations to focus on. At the moment, it's exam period and I'm taking my final exams, but I had already prepared most of the them during the university break, so now I'm mostly just attending the exams so i don't need to set aside too much time for that i believe I would be able to dedicate full-time hours — 8 hours a day — to the internship.

14. o british councilu

The British Council is the UK's international organization for cultural relations and educational opportunities. I know that it promotes collaboration, inclusion, and skills development across different fields — especially among young people and students.

This specific internship programme, Her Cyber: Empowering Women and Girls in Cyber, is focused on encouraging more women to enter the field of cyber security, which is still very male-dominated. I appreciate that the programme is not only about technical skills, but also aims to build confidence, mentorship, and exposure to real-world industry practices. I think it's a great initiative that reflects the British Council's values — especially promoting equal opportunities and supporting young talent.

The internship lasts for 3 months, is paid, and takes place in either Belgrade or Novi Sad.

15. Introduction

My name is Marija Živanović. I am a final-year (fourth-year) student of Software Engineering and Information Technology at the Faculty of Technical Sciences, University of Novi Sad. I went to Šabacka gimnazija high school part. field natural sciences and mathematics, where I developed an affinity for solving logical problems and programming.

During my studies, I have worked on many software development projects, ranging from simple to complex, both in teams and independently. I have the most experience with Python, Java, C#, and JavaScript, but I am currently learning Rust as well. I have also worked on simpler projects in C++ and Go.

My projects include developing web and mobile applications for information and management systems for hospitals, libraries, and cosmetic salons (Java desktop applications and .NET web applications in C#), booking applications developed with Spring Boot and Java on the backend and Angular and TypeScript on the frontend, and a streaming platform for movies and video content using cloud computing. I have experience working with databases and a strong understanding of them, including NoSQL (MongoDB, InfluxDB, DynamoDB) and SQL (H2, PostgreSQL, Oracle).

I have also volunteered and served as a team leader in environmental protection organizations, leading workshops and projects. I speak Serbian and English.

I'm currently completing my full-stack software engineering internship at Schneider Electric in Novi Sad, which started at the end of June and will finish next Tuesday. During this internship, I've been working — and am now finalizing — the development of a web application intended for use in a corporate environment. The application is designed to support the tracking, approval, reviewing, commenting, and revision of technical documentation by various team members and employees across different levels of the company hierarchy. The backend was developed on the .NET platform, and the frontend was built using Angular.

Besides my academic interests, I have a strong passion for literature and reading.

That would be all about me. **What motivates me to become a software developer is the opportunity to constantly learn and solve real-world problems using logic and creativity. I enjoy the process of building something from scratch — turning an idea into a working application that can actually help people. The feeling of having created a finished product, either on your own or with a team, that actually works, serves a purpose, and helps people is priceless.

Also, technology is always evolving, which means there's always something new to discover, and that really keeps me motivated.** 16. ekos

I volunteered at an elementary and high school within the environmental protection organization Ekos, where I first participated as a student competitor. After my team won, I became a volunteer and held lectures and workshops for younger students. In my final year of high school, I also participated for a year in the Generation Unlimited program, where my team and I worked on improving something in our local community — in our case, the high school — by designing a project to install recycling containers and self-recycling machines near the school. The project was funded by UNICEF and UNDP. Our team was selected as one of the top five teams with the best ideas, and we received funding to implement our project.

17. english

I would say that my English is fluent, although I haven't obtained an official certificate. Over the past nine months, I've been taking private lessons to further improve my communication skills and vocabulary — first at the C1 level, and later focusing on advanced Business English, as I wanted to work on my professional communication.

18. STAR

Project Description – Web Booking Application

As part of a three-member team, I worked on a full-stack Web Booking application developed with Spring Boot on the backend and Angular on the frontend. The platform allows users to search for accommodations, make reservations, and leave reviews. It also includes admin functionalities for managing accommodations and users. My focus was on implementing core features and ensuring application security.

My responsibilities included:

- **Authentication & Authorization:** I implemented secure login and registration functionalities using JWT tokens for session handling. Role-Based Access Control (RBAC) was applied so that each user role (guest, owner, admin) had access only to the

features they were allowed to use, had access only to the functionalities appropriate for their role. For example, guests could make and cancel reservations, owners could view and manage their accommodations, while admins could approve or reject new accommodation listings.

- Frontend + Backend role handling:
- On the backend, I used Spring Security with JWT, role-based annotations like `@PreAuthorize` and `@Secured`, and implemented token validation filters.
- On the frontend, I extracted user roles from the token and used Angular guards (`CanActivate`) and conditional rendering to hide or restrict access to components depending on the role. For frontend, I restricted the visibility of buttons, forms, and routes based on the user's role extracted from the JWT. That way, even if someone tried to access a page directly by URL, the backend would block them unless the token matched the required permissions.
- Accommodation Management: I developed the functionality for admins to review and approve accommodation listings submitted by users. Upload functionality included image handling and form data submission via secure endpoints.
- Reservation System: Guests could create and cancel reservations, while owners could track and manage them. Each booking action triggered backend validation based on availability and user role.
- Payments and Reviews: Users were able to pay for reservations, as well as leave ratings and comments for both accommodations and property owners. I implemented review submission, editing, and viewing features.


Cybersecurity Features Implemented:

- JWT-based authentication and RBAC authorization Ensuring that only valid users with proper roles can access protected resources, both on the frontend and backend.
- Two-Factor Authentication (2FA): After the initial login with a password, users had to confirm their identity via a verification code sent to their email, adding an extra layer of security.
- SSL/TLS protocol: To ensure secure data transmission between the frontend and backend, we enabled HTTPS by configuring SSL certificates on the Spring Boot server.
- On the backend, we used a self-signed certificate (in dev) or Let's Encrypt (in prod) and configured it via `application.properties`.

- The Angular frontend communicated with the backend only via <https://> endpoints.
- Keycloak Integration (IAM): In addition to implementing our own auth system, we explored integrating Keycloak as a centralized identity and access management solution. We connected the backend to Keycloak using Spring Security OAuth2 adapters, and used OpenID Connect to handle login, token issuance, and role-based access. This helped us simulate a production-grade enterprise authentication flow, allowing easy SSO and external user federation in future scaling.

What I learned:

Through this project, I significantly improved my understanding of secure full-stack development, including how to design applications that enforce strong authentication, fine-grained access control, secure data transfer, and scalable identity management. I also gained hands-on experience with real-world security practices relevant to both web development and the cybersecurity field

 Action: I used Angular on the frontend to build dynamic components for displaying accommodations, reservations, and reviews. On the backend, I used Spring Boot and a relational database to implement logic for accommodation upload, updates, reservation making, review leaving, and user role checks. I also handled API integration, error handling, and UI feedback. For authentication, I used JWT tokens stored securely in local storage and enforced authorization checks across endpoints.

19. shortly stay and join the cybersecurity field

Web Booking was a project I worked on as part of a three-member team. The backend was developed using Spring Boot, and the frontend was built with Angular. We also paid special attention to implementing cybersecurity measures.

My responsibilities included implementing several key functionalities such as user login and registration, with a focus on authentication and authorization using JWT tokens, as well as role-based access control (RBAC). I handled both frontend and backend implementation of features like accommodation upload by administrators, reservation scheduling and cancellation by users, payment processing, submitting and viewing reviews for both hotels and owners (including comments and ratings).

From a cybersecurity perspective, in addition to JWT-based authentication and role-based authorization, we implemented two-factor authentication (password + email verification) to enhance login security. We also applied SSL/TLS protocols to ensure encrypted communication between the frontend and backend — the Spring Boot backend was configured to serve HTTPS using a valid certificate, and the Angular frontend communicated with it exclusively over secure endpoints.

Additionally, as part of our exploration of advanced security practices, we experimented with integrating Keycloak for centralized identity and access management. We used it to simulate real-world enterprise-level login and authorization flows, exploring features such as SSO, user federation, and OpenID Connect-based authentication.

20. pitanjaa

Do interns work independently or in teams, and are there multiple interns collaborating and communicating with each other, or is there only one per company?

During which period of the year does the internship officially start?

Do interns work on real projects developed by the host company, or do they work on separate projects specifically designed for the internship, focusing more on learning?