

Shubham Agarwal

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EDUCATION

SAARLAND UNIVERSITY

M.Sc. COMPUTER SCIENCE

Since Apr, 2018* | Saarbrücken, DE
Cum. GPA: 1.6* / 4.0

VIT, VELLORE

B.TECH. COMPUTER SCIENCE

(SPEC. IN BIOINFORMATICS)

May, 2017 | Vellore, IN
Cum. GPA: 8.78 / 10.0

LINKS

LinkedIn:// shubhamagarwal401

COURSEWORK

GRADUATE

Web Security
Mobile Security
IT Forensics
Data Networks
Machine Learning in Cybersecurity
Data Privacy Enhancing Techniques
Artificial Intelligence

UNDERGRADUATE

Data Structures
Operating Systems
Algorithm Design & Analysis
Data Mining & Warehousing
Software Project Management
Database Management System

SKILLS

PROGRAMMING

Over 5000 lines:
Python • JavaScript • C# • SQL
Over 1000 lines:
C++ • Java • PHP • NoSQL

OPERATING SYSTEMS

Linux • Windows • Android

AWARDS

- Full Scholarship for Graduate Studies - IMPRS
- Employee of the Quarter - INSZoom
- Hackathon Winner * 2 - INSZoom

LANGUAGE

- English - Advanced
- Deutsch - Beginner

EXPERIENCE

MAX PLANCK INSTITUTE FOR INFORMATICS | STUDENT

ASSISTANT - INTERNET ARCHITECTURE

Feb, 2020 - Present | Saarbrücken, DE

- **Technology Stack** - C++, Python & P4
- Low-level (L2/L3) topology & routing design and implementation for programmable SDNs.

SAARLAND UNIVERSITY | TEACHING ASSISTANT - SE 2019

Oct, 2019 - Mar, 2020 | Saarbrücken, DE

- Project Manager for course projects involving graduate students and third-party clients.

IT INKUBATOR (UDS) | STUDENT ASSISTANT

Jun, 2019 - Nov, 2019 | Saarbrücken, DE

- **Technology Stack** - C++ & TypeScript
- Core Library Development and Integration.

INSZOOM | PRODUCT ENGINEERING TRAINEE

Feb, 2017 - Mar, 2018 | Bangalore, IN

- **Role** - Full Stack Application Development.
- **Technology Stack** - ASP.NET MVC Framework, C#, MS SQL 2016 (Relational + Document/JSON), JavaScript frameworks.
- **Major Contributions** - Design & Implementation of Secure Authentication Module, Web Services for Routine Actions, Third-Party REST Web API Integration, Chrome Extensions, Database Design, User Interfaces and Automated Testing Modules.

RECENT PROJECTS

- **Investigation of the Impact of Manipulating Security Headers by Browser Extensions*** | Research Immersion Lab | Large-scale analysis of chrome extensions that alter security headers and quantifying associated threat.
- **Client-Side CSRF Vulnerabilities in Web Applications** | Master Thesis | Python, JavaScript, NodeJS, SQL | Large-scale analysis of top 1 million web applications to investigate Client-Side CSRF by implementing automated web framework.
- **ML Applications in Medical Diagnosis & Potential Adversarial Impacts** | ML in CyberSecurity | Python | Evaluation of various evasion & poisoning attacks on medical dataset & leveraging DC-GAN to synthesize new similar data points.
- **#HeOrShe - Gender Inference from text articles using DNN & NLP Tools** | PETS | Python | Binary classification - extension of existing Neural Networks with LSTM & CNN for enhanced accuracy.
- **IPC Provenance & SELinux Extensions in Android** | Mobile Security | Java, C++ | Extended IPC call-chain tracking & SELinux policies in Android middleware for fine-grained identity & access-control management over privileged resources.