

# Mohammad Salar Arbabi



## Personal Information

Address 0650, Oslo, Norway  
Emails mohamarb@ifi.uio.no, slrarbabi@gmail.com  
Web Page <https://slrarbabi.github.io>  
Year of Birth 1994

## Education

- Sept. 2019 - Aug. 2023 **Ph.D. Research Fellow**, *Department of Informatics (IFI), University of Oslo (UiO)*  
- **Thesis:** Secure and Verifiable Managing and Sharing of Medical Records Using Smart Contracts and Blockchain
- Sept. 2016 – Jan. 2019 **M.Sc. in IT Engineering with specialization in Electronic Commerce**, *Department of Computer Engineering, Amirkabir University of Technology (Tehran Polytechnic)*  
- **Thesis:** Incentivized and Decentralized Delivery Network of IoT Updates Based on Ethereum Smart Contracts and Blockchain technology
- Sept. 2011 – June 2016 **B.Sc. in IT Engineering**, *Department of Computer Engineering, Sharif University of Technology (SUT)*

## Experience

- Aug. 2019 - Aug. 2023 **Scientific Research on Utilizing Blockchain for Healthcare Systems**  
- Researching at *BlockchainLab* at UiO within *SmartMed* project, in close collaboration with *Cancer Registry of Norway*, to exploit blockchain and smart contracts in the healthcare domain and consent management systems. My research included analyzing challenges in healthcare storage systems, designing, implementing, deploying, and evaluating blockchain-based solutions.
- Surveying System Analysis & Design Hyperledger Sawtooth Deployment  
Hyperledger Fabric Test Design Collaboration Dockers Documentation  
Presentation GDPR Privacy Requirements Consent Management Systems
- Feb. 2017 - Jan. 2019 **Research Assistant in *Electronic Commerce* laboratory**  
- Implementing the idea of decentralized architecture to update IoT devices via a blockchain-based distributed framework within Ethereum smart contracts.
- Ethereum Remix Truffle Java Solidity Blockchain Ganache  
Distributed Ledgers Distributed Systems IoT Systems Git
- Feb. 2017 - Jan. 2019 **Research Assistant at *Fintech Research Center***  
- The scope of my activities were organizing workshops in the area of blockchain and smart contracts. I served as the main instructor of the workshop, teaching the *principals of the Ethereum blockchain technology*, *Ethereum smart contracts*, and the *solidity programming language* to more than 30 participants.
- Bitcoin Consensus Algorithms Cryptocurrencies Solidity
- Dec. 2019 - Dec. 2022 **Webmaster of *SmartMed* and *Blockchain Lab* at UiO Websites**  
Website Design & Development Logo Design HTML CSS Javascript

May 2015 - Aug. 2015  
Tehran, Iran

## Android Developer

- Working as an Android developer for summer internship at ARSH company. Developing “GrapeFruit” Android smart phone application to ensure devices’ security and prevent malicious software security attacks.

Java Large-Scale Application Development Git Scrum JIRA

2011-2022

## Teaching

Served as the main instructor or teaching assistant, for 12 distinctive courses (including Java Programming and Distributed Systems) , at UiO, Tehran Polytechnic, and SUT universities throughout my education.

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## Skills

Programming

Java, Solidity, GO, C, C++, Python

Web/DB

HTML, CSS, NodeJS, JavaScript, Microsoft SQL Server

Frameworks

Django, Web-3, Truffle, Drizzle, Hadoop

IDEs

IntelliJ, MS Visual Studio, Eclipse, Android Studio, XCode

Type Writing

L<sup>A</sup>T<sub>E</sub>X, MS Office

Network Tools

PacketTracer, Wireshark

Other

JIRA, Git, Docker, Asana, Trello, Gephi, Pajek, CPN-Tools, Ganache, Remix, CORBA, Peersim, Spread, Azure, NREC

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## Languages

Native

Persian (Farsi)

Fluent

English

TOEFL (Nov. 4, 2018 ) Total: 104/120

Intermediate

Norwegian (Bokmål)

B1 Certificate - Motivated to enhance

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## Honors and Awards

Feb. 2018

**Ranked 1st**, based on GPA, among M.Sc. students of AmirKabir University of Technology with total GPA of 19.73/20

Sept. 2016

**Ranked 6th**, among 30,000 students in the annual National University Entrance Exam for M.Sc. study program.

Sept. 2011

**Ranked 67th**, among 500,000 students in the annual National University Entrance Exam for bachelors study program.

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## Publications

Dec. 2022

**Tracking Decisions about Granting Access to Health Data: Requirements and an Architecture**, Submitted to *IEEE International Conference on Blockchain and Cryptocurrency (ICBC) 2023*

Nov. 2022

**A Survey on Blockchain for Healthcare: Challenges, Benefits, and Future Directions**, Accepted in *IEEE Communications Surveys and Tutorials (IEEECOMST)*

Sept. 2019

**Decentralized and Secure Delivery Network of IoT Update Files Based on Ethereum Smart Contracts and Blockchain Technology**, Accepted in *ACM CASCON 2019*

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## References

Ph.D. Supervisor

**Prof. Roman Vitenberg**

(Webpage: [link](#))

Ph.D. Co-Supervisor

**Dr. Jan F. Nygård**

(Webpage: [link](#))

PostDoc Colleague

**Dr. Thiago Garrett**

(Webpage: [link](#))

Course Co-Instructor

**Dr. Amirhosein Taherkordi**

(Webpage: [link](#))