

# Shaunak Juvekar

[shaunakjuvekar.github.io](https://shaunakjuvekar.github.io) | (540)-558-3156 | [shaunak.juvekar@gmail.com](mailto:shaunak.juvekar@gmail.com) | [linkedin.com/in/shaunak-juvekar](https://linkedin.com/in/shaunak-juvekar) |

## Education

### Master of Engineering in Computer Science

Virginia Tech (3.83/4)

Blacksburg, Virginia

Expected May 2024

- Courses: Information Storage and Retrieval, Big Data Engineering, Data Analytics, Networks Programming, Software Engineering

### Bachelor of Engineering in Electronics and Telecommunication

Savitribai Phule Pune University (3.6/4)

Maharashtra, India

May 2018

- Relevant courses: Data Structures and Algorithms, Object Oriented Programming, Computer Networks, Artificial Intelligence, Digital Image Processing

## Skills

**Languages:** JavaScript, Python, Java, C, Lua, MATLAB

**Web Technologies:** NodeJS, Flask, ReactJS, HTML, CSS

**Datastores:** PostgreSQL, MySQL, MongoDB, Elasticsearch

**DevOps:** AWS, Docker, Linux

**ML and Data:** Pandas, NumPy, Apache Spark, Matplotlib, Scikit-learn, Seaborn

**Tools:** Git, Postman, JIRA, Jenkins

## Experience

### Software Engineering Intern

06/2023 – 08/2023

Mediaocean, NY, USA

9 weeks

- Spearheaded the implementation of a thumbnail generation service using AWS Lambda, AWS S3, Python, FFMPEG, GraphQL, and ReactJS.
- Demonstrated expertise in designing and executing comprehensive unit tests using Unittest.
- Successfully addressed and resolved React Typescript bugs for the Pinterest Ad Manager.
- Adhered to best practices, actively participated in code reviews, and contributed proactively as a member of the Pinterest team.

### Research Assistant, Virginia Tech [GitHub]

04/2023 - 07/2023

- Collaborated with Dr. Subhash Sarin and PhD student Akshat Kothiyari from the ISE department and led the development of SWEEP, a web-based tool that revolutionizes Municipal Solid Waste (MSW) management system design. It enables users to efficiently determine the optimal number, sizes, and strategic locations of facilities within each echelon, resulting in a comprehensive execution plan.
- Employed a robust tech stack, including ReactJS, OpenStreetMap APIs, Bootstrap, and Python Flask, to create a highly responsive and user-friendly application that effectively addresses real-world waste management challenges.

### Software Developer

07/2020 – 07/2021

Gibots, Pune, India

1 year

- Implemented end to end RPA solutions by developing APIs using ExpressJS and integrated Java (Apache PDFBox), Javascript (Officegen) and Python (PdfPlumber) libraries, generating up to 90 percent savings in manpower cost.
- Built a custom Rule Engine for Javascript and Regex evaluation which automated and streamlined client's processes.
- As the module lead, coordinated regular meetings with the client to discuss work status, report issues regarding implementation and get feedback on production delivery.
- Devised the architectural solution of project and collaborated with project managers for time estimation and planning.

### Software Engineer

07/2018 – 03/2020

Vodafone Shared Services, Pune, India

1 year, 8 months

- Engineered automation solutions for Vodafone TV for their STB(Set-top Box), Web and Android platforms using Python and Lua.
- Analyzed and integrated Kaltura API's and custom logic functions in GUI and API scripts.
- Developed multi-folder data gathering scripts which parsed through XML data.

### Project Intern

07/2017 – 03/2018

Aker Solutions, Pune, India

8 months

- Interfaced driver circuits, implemented feedback mechanisms and actuator valve control for developing a 6DOF robotic arm for an ROV.
- Implemented serial communication, socket programming and joystick control using embedded C and Python.

---

## Projects

**Search Engine for ETD data** [\[Link\]](#) 10/2022 - 12/2022

- Implemented the backend functionality of a search engine using Elasticsearch and Python for 30K ETD's - Electronic theses and dissertations.
- Developed data ingestion scripts for Elasticsearch, search API's and logging functionality for ML models.

**Reliable Packet Delivery System** [\[Github\]](#) 11/2022 – 12/2022

- Designed and developed a transport protocol that provided reliable datagram service amidst dropped and duplicated packets and high latency environments.
- Implemented the TCP Reno algorithm for congestion control and analyzed performance under a variety of conditions.

**Ride Sharing Platform** [\[Github\]](#) 03/2023

- Designed and implemented a scalable AWS architecture for a ride-sharing application, utilizing AWS CodeCommit, AWS Amplify, DynamoDB and AWS Lambda.
- Ensured security and authentication using HTTPS and API Gateway with Cognito user pool authorization.