## Arjoonn Sharma

arjoonn.com, talk@arjoonn.com

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Education	Notable (tasks/achievements)	
& Employment		
Midpath software  Sept 2022 - current	<ul> <li>Director / Software Engineer</li> <li>Built an offline first learning management platform for young children.</li> <li>An offline first CI/CD system based on docker for micro projects that don't even reach github/gitea.</li> <li>A platform for efficient distribution and re-distribution of covid vaccines based on</li> </ul>	
	<ul> <li>available dosage in each clinic in a city and demand in each clinic.</li> <li>Donations backend for yultimate.org and app.yultimate.org (django, postgres, Linode)</li> <li>Worked with smaac.in on multiple projects including webapp.smaac.in (vue, htmx, django, flask, ms-sql, e2e cloud, S3, next.js, gitlab.com)</li> </ul>	
	<ul> <li>Worked with Resonanz group on Quicktrials.com (Django, postgres, GCP)</li> <li>Extensive work with docker and self hosted infrastructure (glitchtip, dozzle, grafana, victoria metrics, uptime monitoring)</li> </ul>	
Instabase.com	<ul> <li>Solutions engineer (remote)</li> <li>Architecture and implementation of SDLC process at the solution engineering</li> </ul>	
Sept 2021 -Sept 2022	<ul> <li>organization.</li> <li>Building solutions for automated document processing at CITIbank, Royal Bank of Canada, MUFG Investors.</li> <li>Anchor based value extraction from documents that improved extraction</li> </ul>	
	<ul> <li>performance by 10-15% on average.</li> <li>Document clustering across multiple projects and document types in a library restricted environment.</li> </ul>	
	<ul> <li>Built tooling to help soleng be more effective on their solutions.</li> <li>Model building for document understanding based on BERT/DETR.</li> </ul>	
Smaac Net Solutions Pvt. Ltd	<ul> <li>Senior software consultant (remote)</li> <li>Architect of web ERP system</li> <li>Migration of codebase from VB .NET to Python + Vue.js technology stack</li> </ul>	
Mar 2021 -Sept 2021	- Security updates for the application using modern security practices - Training / Hiring	
-зері 2021	<ul> <li>Trained existing employees in python, vue, web development, database management, and RDBMS normalization techniques.</li> </ul>	
	<ul> <li>Helped the firm introduce modern test based hiring practices and reduce it's attrition rate.</li> <li>Introduced the firm to CI/CD practices and helped them set up their first testing pipelines.</li> </ul>	
Premiere Digital Services	<ul> <li>Software Engineer (remote)</li> <li>Worked as a SE on a website built with flask, sqlalchemy, postgresql, redis, nginx,</li> </ul>	
	aws, elasticsearch, and fabric.	
Oct 2019 - Feb 2021	<ul> <li>We work in a fast iteration setup with practices from agile</li> <li>Wrote the bug fixing flow documentation for the product.</li> <li>Managed bug triage during IST work hours.</li> <li>Built several core features for the website including the notifications system for</li> </ul>	
	<ul> <li>example.</li> <li>Improved page response times by optimizing bottlenecks in template rendering functions.</li> </ul>	
	<ul> <li>PyJaipur volunteer and meetup organizer</li> <li>Organize monthly meetups, community calls</li> </ul>	

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	<ul> <li>Contribute to community software and maintain PyJaipur website.</li> <li>India Linux Users Group Delhi volunteer and occasional speaker (link)</li> </ul>
IIITM-Kerala CUSAT  July 2019 - Nov 2019	<ul> <li>Visiting faculty AI and knowledge representation (link)</li> <li>The course was managed over gitlab</li> <li>Used CI to automate assignment testing</li> <li>Software training: Git + gitlab for the first year MSc students.</li> </ul>
CLAP Research  May 2017 - Oct 2019	<ul> <li>Principal engineer         <ul> <li>Lead a team of 7 on the project to launch the first version of the product called Voody.(link)</li> <li>Lead the team to build the first document tagging system in the company. (link)</li> </ul> </li> <li>Research engineer on closed domain search system         <ul> <li>Built API service using bottle, nginx, mysql, mongodb, pytorch, and tensorflow.</li> <li>Developed the first document question-answer system in the company, leading to the first beta of the product.</li> <li>Developed an automated plug-and-play website helper chat bot without the need for the site to expose its APIs.</li> </ul> </li> <li>Handled DevOps         <ul> <li>Built CT system with gitlab, pytest, and docker</li> <li>Built CD system with gitlab, docker</li> <li>Formulated the development cycle and improved feature development speed.</li> </ul> </li> <li>Built the interview management website for the company.</li> <li>Signal &amp; Noise: Talk, CET (Fb dev circles)</li> <li>Panelist, Ethics in AI, Dhyuthi (IEEE event) (link)</li> <li>Won Huddle Kerala (All India startup pitch)</li> <li>NASSCOM emerge 50 winners (link)</li> <li>Singularity University talk about Random Forests (link)</li> <li>Challenges in NLP: Talk, (Fb dev circles)</li> <li>Workshop on ML in NIT-Calicut</li> </ul>
Dept of IT & Comm - Govt of Rajasthan  Aug 2017 - Feb 2018	<ul> <li>Built API server + phoneGap app for Aanganwaadi project</li> <li>Lead dev on 2 person team for project</li> </ul>
Ernst & Young  Jan 2017 - Apr 2017	<ul> <li>Advanced data analytics intern doing Monte Carlo based mutual fund inflation rate calculation</li> <li>Increasing sample efficiency of classic Q learning system as MSc project</li> <li>Won all India hackathon by Govt of Rajasthan 3/3700 (link)</li> <li>Built a website to train your own image classifiers and receive predictions on new data.</li> <li>Proposed that it may be used to provide expertise to remote villages where actual expert person might not be able to travel.</li> </ul>
64 Squares June 2016	<ul> <li>Built web dashboard for analytics app</li> <li>Performed data cleaning, deduplication</li> <li>Participated in Kaggle contest under company supervision</li> </ul>
Certifications	<ul> <li>TOEFL(108/120) exam 16 Feb 2019</li> <li>GRE(327/340+4/6) exam 31 Dec 2018</li> <li>NET exam qualified for assistant professor 5 Nov 2017</li> <li>GATE(483) exam 11 Feb 2017</li> </ul>

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MSc. Computational Science  IIITM-Kerala (CUSAT)  Aug 2015 - Apr 2017	<ul> <li>First division, university rank 3</li> <li>Ranked 7 / 3902 in the HackerEarth SigTuple image segmentation challenge. (link)</li> <li>Kaggle Kernels Expert with a world rank of 39/55,000 (link)</li> <li>Featured on the Kaggle Blog, No free Hunch. (link)</li> <li>Founded SigML(Special Interest Group, Machine Learning)</li> <li>Won 3rd prize (project contract worth 7.5 Lakh INR) in all India Rajasthan IT Day Hackathon (link)</li> </ul>
BSc. Physical Sciences with computer science St. Stephen's College DU July 2012 - May 2015	<ul> <li>First division</li> <li>Received All India Scholarship for Higher Education (INSPIRE - Department of Science and Technology Govt of India) for all 3 years of BSc. This is awarded to students who were ranked within 1 % out of 8,15,000 students who passed the exam that year (2012).</li> <li>Vikas Dhaka Scholarship awardee.</li> <li>President of the Web Team         <ul> <li>Built the college website prototype along with a friend which later formed the base for the new website.</li> <li>Submitted a report on digitizing activities in the college to the principal which was later acted upon.</li> </ul> </li> <li>(Head Programmer) We worked to build the Computer Society from 5 to 32 members in 2 academic years.</li> </ul>
DPS Sushant Lok 2009-2012	<ul> <li>AISSCE, AISSE (CBSE) Exams (School rank 2 in class 12 exams)</li> <li>AFS All India "India Thailand Student Exchange" member of a team of 16 students from across India.</li> <li>National CBSE Science Exhibition - All India winner from all schools affiliated to Central Board of Secondary Education (link).</li> <li>Head boy in class 12 and Vice head boy in class 11         <ul> <li>Formulated the student council structure during that time.</li> </ul> </li> </ul>

**References** of the following professors can be made available.

- <u>Dr Rajashree MS</u> Vice Chancellor APJ Abdul Kalam Technological University
- <u>Dr Asharaf S</u> Professor IIITM-Kerala
- <u>Dr T.K. Manoi</u> Professor IIITM-Kerala

## Memorable Events/Code/Creations

- Function type signature search <a href="https://github.com/theSage21/sigsearch">https://github.com/theSage21/sigsearch</a>
- PyJaipur core member <a href="https://github.com/orgs/PyJaipur/people">https://github.com/orgs/PyJaipur/people</a>
- Reproduction of the Lorentz embeddings paper <a href="https://github.com/theSage21/lorentz-embeddings">https://github.com/theSage21/lorentz-embeddings</a>
- Author of bottle-tools <a href="https://bottle-tools.readthedocs.io/en/latest/">https://bottle-tools.readthedocs.io/en/latest/</a>
- Reproduction of Stochastic Delta Rule <a href="https://github.com/theSage21/stochastic delta rule">https://github.com/theSage21/stochastic delta rule</a>
- Recurrent Weighted Average implementation <a href="https://github.com/theSage21/torchzoo/">https://github.com/theSage21/torchzoo/</a>
- Line laser based 3d point cloud generation <a href="https://github.com/theSage21/3d-scanner">https://github.com/theSage21/3d-scanner</a>
- Did @dabeaz compilers course https://www.dabeaz.com/compiler.html
- Contributed new dataset to Facebook ParlAI https://github.com/facebookresearch/ParlAI/pull/983
- OSFY: An overview of AI <a href="https://opensourceforu.com/2017/12/story-behind-pervasive-ai/">https://opensourceforu.com/2017/12/story-behind-pervasive-ai/</a>
- OSFY: Managing your reading with espeak <a href="https://opensourceforu.com/2016/06/bookread-software-reads-books-aloud/">https://opensourceforu.com/2016/06/bookread-software-reads-books-aloud/</a>
- OSFY: Open Judge <a href="https://opensourceforu.com/2015/11/openjudge-an-online-judge-for-offline-programming-contests/">https://opensourceforu.com/2015/11/openjudge-an-online-judge-for-offline-programming-contests/</a>
- OSFY: Converting plaintext to handwriting <a href="https://opensourceforu.com/2016/11/converting-plain-text-handwritten/">https://opensourceforu.com/2016/11/converting-plain-text-handwritten/</a>
- OSFY: Coding in indic languages https://opensourceforu.com/2015/09/pytongue-programming-in-non-english-languages/