

ASHUTOSH MISHRA

Software Development Engineer

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📍 Texas, USA (Open to relocate) [in /ashutoshm1771](https://www.linkedin.com/in/ashutoshm1771) [GH /ashutoshm1771](https://github.com/ashutoshm1771) [IG /ashutoshm1771](https://www.instagram.com/ashutoshm1771)

EDUCATION

Master of Science, Computer Science, Texas A&M University-Corpus Christi, GPA - 3.9 / 4.0 Aug 2022 - Aug 2024

Bachelor of Technology, Computer Science & Engineering, JNTU-K, GPA - 8.94 / 10 GRE(Q) - 165 / 170 Aug 2017 - Jul 2021

TECHNICAL SKILLS

Languages: Python (PyTorch, Tensorflow, Darts, Lightning), C#, C/C++, JavaScript (Angular, React), Java, Shell Script, Bash

Web Technologies: ASP.NET, Next.js, REST, gRPC, SOAP. **Databases** - SQL (MySQL), NoSQL (Azure CosmosDB, MongoDB, Firebase)

Developer Tools: Azure, Git, HPC, GPU/TPU, Parallelization, MPI, OpenMP, PThread, CUDA, Software Design, UML, ML/DL/Gen-AI.

RELEVANT EXPERIENCES

Software Developer Oct 2024 - Present
ThothIT LLC Irving, TX (Remote)

- Working on building microservices apps using ASP.NET, React, MySQL & Mongo. Migrating monolithic apps to microservices.
- Dockerizing microservices, introducing stateless distributed servers across many data centers, and integrating Gen-AI services.

Research Assistant - Graduate October 2022 - Aug 2024
TAMUCC, Aero-Structural Optimization Lab Corpus Christi, TX

- Led the AI division of an NSF-funded interdisciplinary research for optimizing engineering design using ML, DL & Generative AI.
- Implemented various Gen-AI models. Designed custom data structures in C++ & Python to run parallel algorithms in HPC/GPU.
- Published papers in top-ranked journals, presented works in 6 intl. conferences & was thus offered a fully-funded PhD program.

Freelance Software Developer March 2024 - Oct 2024
Jewelry Inventory and Sales Management Software Corpus Christi, TX

- Developed an inventory management system for 2 jewelry stores in Corpus Christi, TX to manage around 400 customers weekly.
- Used Next.js/React, Tailwind CSS for UI, ASP.NET Core Web API for backend logic, Clerk and Identity Server for authentication.

Software Development Engineer Aug 2021 - Jun 2022
Keka HR & Payroll Technologies Hyderabad, India (Hybrid)

- Promoted to full-time Software Developer to create SaaS apps using ASP.NET Core, C#, Angular, SQL/NoSQL & Azure DevOps.
- Developed cloud-based native apps served to over 1.5 million users. Migrated to microservices which reduced infra load by 30%.
- Participated in Scrum meetings, product retrospectives and code review sessions. Supervised 5 interns and reviewed their tasks.

Full-Stack Software Developer - Intern Feb 2021 - Jul 2021
Keka HR & Payroll Technologies Hyderabad, India (Remote)

- Developed new & maintained existing features for SaaS applications. Contributed to migration of Azure deployment platform.

AWARDS

Outstanding Islander Graduate - TAMUCC Summer 2024
*The **best (exceptional)** performing student of TAMUCC College of Engineering and Computer Science*

The Trust and Safety Scholarship Scheme (\$15k and \$10k) 2022 & 2023
*Two scholarship awards based on idea proposition to **Cognizant Inc.** regarding a trending topic in Computer Science*

TAMUCC Scholarships (Total worth - \$9k) 2022 - 2024
Multiple scholarship awards by various departments due to academic and research performances.

Indian Embassy Complex Scholarship (Total worth - \$30k) 2017 - 2021
Full scholarship with stipend for 4-year undergraduate degree based on exceptional results in a competitive exam.

Problem Solving **Advanced**, C programming **Advanced** Sep 2020
*Awarded the Advanced certifications on Problem Solving and C programming by **Hackerrank***

PUBLICATIONS & CONFERENCE PROCEEDINGS

- Cid Montoya M, **Mishra A**, Verma S, Mures O A, Rubio-Medrano C E (2024) Aeroelastic force prediction via temporal fusion transformers. **Computer-Aided Civil and Infrastructure Engineering [IF=8.5]**, In press. DOI: 10.1111/mice.13381
- Verma S, Cid Montoya M, **Mishra A**. (2024) Shape- and frequency-dependent self-excited forces emulation for the aero-structural design of bluff deck bridges. **Journal of Wind Engineering and Industrial Aerodynamics [IF=4.2]**, 252, 105769. DOI: 10.1016/j.jweia.2024.105769
- 6 other international engineering conferences on the contribution of computer science/artificial intelligence in engineering.