

DANIAL SAMY

Senior Software Engineer | Bioinformatics & Healthcare Technology
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PROFESSIONAL SUMMARY

Results-driven **Senior Software Engineer** with a background in **biomedical science and bioinformatics**, specializing in **C#, .NET, and cloud-based SaaS solutions** for the healthcare industry. Proven success in designing secure, scalable architectures (AWS), optimizing high-performance data systems, and translating complex biomedical data into actionable insights. Published **7 peer-reviewed papers**, demonstrating strong analytical and research capabilities.

TECHNICAL SKILLS

Languages: C#, Python, SQL (T-SQL, PostgreSQL), Java, Bash/Shell, PHP, Swift, Kotlin

Frameworks & APIs: .NET (Core & Framework), ASP.NET, REST APIs, HL7, FHIR, ADO.NET, Windows Forms

Databases: MS SQL Server, PostgreSQL, MySQL

Cloud & Tools: AWS, Azure DevOps (ADO), Git, Visual Studio, Iguana, samtools

PROFESSIONAL EXPERIENCE

ClaimInformatics – Bloomfield, CT (Remote)

Senior Software Engineer | May 2023 – Present

- Architected and deployed **AWS- and C#-based encryption tools** securing production database connections for a core SaaS healthcare application, improving HIPAA compliance.
- Owned and optimized a high-volume **C# batching system** generating thousands of overpayment recovery letters; developed new modules for **MRR and Appeals workflows**.
- Authored and tuned **complex T-SQL queries** for large-scale claims data; delivered critical production fixes and new client features on tight deadlines.

VigiLanz – Minneapolis, MN (Remote)

Software Developer | Mar 2022 – Mar 2023

- Engineered **C# data ingestion services** handling REST APIs, HL7 messages, and flat files to support hospital infection prevention and patient safety applications.
- Provided **production support and root cause analysis** for client issues; delivered timely patches and service improvements in a SaaS environment.

University of South Florida, Morsani College of Medicine – Tampa, FL

Bioinformatics Researcher | Jun 2014 – Dec 2018

- Developed **custom bioinformatics pipelines** (Bash, PHP) to process and analyze terabytes of genomic data from TCGA, resulting in **7 peer-reviewed publications (2 first-author)**.
- Created algorithms to detect **T-cell Receptor (TcR) and gene recombination patterns** in exome data, contributing to novel **tumor immunoscore methods**.

University of South Florida, Honors College – Tampa, FL

Web Developer | Aug 2012 – May 2016

- Built and maintained dynamic **student and staff portal utilities** using ASP.NET, PHP, HTML, and MySQL; automated academic data workflows and form submissions.

EDUCATION

Georgia Institute of Technology – Atlanta, GA

M.S. in Computer Science | Expected 2027

Specializations: Artificial Intelligence, Human-Computer Interaction (HCI) | GPA: 4.0

University of South Florida – Tampa, FL

B.S. in Biomedical Sciences, Summa Cum Laude | 2016

Minor: Biomedical Physics | GPA: 3.93

PUBLICATIONS

- **Samy, M. D.**, et al. (2017). *T cell receptor gene recombinations in human tumor specimen exome files*. *Cancer Immunology, Immunotherapy*. [PMID: 27995306]
- **Samy, M. D.**, et al. (2016). *Impact of SNPs on CpG Islands in the MYC and HRAS oncogenes*. *Cell Cycle*. [PMID: 27074591]
- Co-author on 5 additional papers in *International Journal of Cancer*, *Current Genomics*, and *Human Vaccines & Immunotherapeutics*.

ADDITIONAL HIGHLIGHTS

- **Security & Compliance:** Experienced with HIPAA-compliant architectures and secure data transfer protocols.
- **Interdisciplinary Expertise:** Bridges biomedical research and modern software engineering practices.
- **Leadership:** Mentored junior developers; led production-critical deployments and client rollouts.