

ANOOP KALRA

US Citizen | (510) 560-3232 | anoop.k.kalra@gmail.com | B.S. Computer Science

OBJECTIVE

To obtain a challenging position involving software design and development that leverages my skills in full stack development, AI, networking and robotics.

WORK EXPERIENCE

- 2023 November – Present **Software Engineer, Vimsel Inc.**

 - Automating the triage process by adapting computer vision (CV) techniques to pre-process medical imaging for diagnostic examination by relevant radiologists. Integrating deep learning with the triage system to identify severity and urgency of ailments and potential treatment plans.
- 2020 September – 2023 October **Full Stack Software Engineer, Tesla Inc.**

 - Extended, improved, and maintained Tesla's internal Enterprise Resource Planning (ERP) and IT systems using technical capabilities comprised of database, web development, reporting, and API-level support using .NET Core, Angular Framework, SQL, AI and machine learning techniques.
 - Responsible for centralizing, integrating, streamlining, and optimizing business processes for supply chain, product planning, inventory, sales order management, and production asset/finance management.
 - Supported engineering teams by translating requirements and preferences for Tesla prototyping and advanced capabilities to measurable and defined internal features and options. This enables a finer degree of tracking and further development and integration of new technologies into vehicles and energy.
 - Enhanced manufacturing processes by optimizing supply chain through stringent just-in time inventory management for preventing both shortages and surpluses of necessary parts and materials while also keeping up with the rapidly changing automated assembly line processes within Tesla.
 - Identified and resolved misalignments among manufacturing, financial systems, and WARP, Tesla's custom ERP systems. Reconciliation of both data and ongoing processes allows for fine-tuning of management controls.
 - Provided business and accounting management teams with live accounting data and actionable reports to better inform Tesla business decisions involving demand forecasting and supply chain.
- 2019 June – 2019 August **Intern, AT&T Labs**

 - Developed a Deep Learning Enhanced Automated Certification Engine, hosted on AWS to test protocol conformance and network performance parameters.
 - Used scripting languages, network virtualization, a software-defined network environment, and automation and testing tools such as Jenkins. Deep learning was used for test environment configuration and test case specification.
- 2018 August – 2018 December **IT Classroom Support, UMD Department of Information Technology**

 - Troubleshooted A/V technology used in classrooms and lecture halls at UMD.
- 2018 May – 2018 August **Intern, Verisign**

 - Developed an API using Golang to set up and configure network filters.
- 2016 September – 2017 January **Researcher, MITRE Corporation**

 - Conducted research with a focus to gain privileged access to an Amazon Echo using hardware hacking techniques.
- 2016 June – 2016 September **Android Cybersecurity Architecture Intern, MITRE Corporation**

 - Developed an object detection system for Android.

SKILLS & TOOLS

<i>Software Development</i>	Linux, C#, SQL, Java, C, Python , Golang, Typescript, HTML, CSS, PHP, OCaml, Ruby, JavaScript, Rust, Tcl, Arduino, PostgreSQL, NoSQL
<i>Dev Tools</i>	.NET Core + Framework, Angular, ASP.NET, Visual Studio , React, Docker, Kubernetes, Splunk, Dynatrace, Android Studio, Unity3D, OpenAI, PyTorch
<i>Productivity</i>	Git, VirtualBox, Parallels , Microsoft Office, Visio, Adobe Acrobat, OneDrive
<i>Miscellaneous</i>	Agile , Vyatta Network OS, Spirent Test Center, AWS, OpenSSL, OpenCV, R

EDUCATION

<i>2017 August – 2020 May</i>	<i>University of Maryland College Park, MD</i> B.S. Computer Science , GPA: 3.578 Completed the First-Year Innovation & Research Experience (FIRE) Program
<i>2013 September – 2017 June</i>	<i>Thomas Jefferson High School for Science and Technology (TJHSST), Alexandria, VA</i> AP Scholar, GPA: 4.17

PERSONAL & ACADEMIC PROJECTS

<i>2017 August – 2018 December</i>	<i>First-Year Innovation and Research Experience (FIRE) Program</i> <ul style="list-style-type: none">In the FIRE Automated Unmanned Systems Stream (FIRE AUSS), developed an algorithm to guide a robotic vehicle to collect solar power more efficiently.
<i>2016 March – 2017 November</i>	Rubik's Cube Sculpture Project Lead, <i>LMI Government Consulting</i> <ul style="list-style-type: none">Led a team to design and develop a large controllable LED Rubik's Cube sculpture for the LMI HQ by creating Android and Arduino control interfaces.

AWARDS & ACCOLADES

- Recipient of University of Maryland President's Scholarship
- Awardee of 2018 University of Maryland Dean's List
- 2016 Conrad Spirit of Innovation Challenge Cybersecurity National Finalist Team
- eCybermission Honorable Mention, National Level 2013
- Winning team member of the You Can Do the Rubik's Cube Competition, 2012-2013; 2nd place 2014
- Distinguished Alumni Award from John Hopkins Center for Talented Youth

ACTIVITIES & COMMUNITY SERVICE

- Indoor, grass, and beach volleyball player
- Juggling: various advanced 3 ball patterns and basic 4-ball juggling
- Two-time Pi Recitation Contest winner
- President of TJ Send-a-Smile Club for Operation Smile
- Member of Executive Board of TJ Rubik's Cube Club
- Webmaster for TJ Intermediate Computer Team
- Creator of a math tutoring program for students at the Vienna Community Center
- Varsity Tennis for TJHSST