

RESUME

Osman Turan

Personal Information	Citizenship Turkish Republic Birthday 26 th May 1985 Languages Turkish (native), English (good)
Contact Information	E-Mail osman@osmanturan.com Cellular (+90) 555 784 27 26 (+90) 536 884 27 26 Web Address http://www.osmanturan.com Zirve University, Kızılhisar Campus, Faculty of Engineering, Electrical-Electronics Engineering Department, Office: 428, 27260 Gaziantep / TURKIYE
Education	B.S. Electrical-Electronics Engineering, June 2009 Kahramanmaraş Sütçü İmam University, Kahramanmaraş / TURKIYE GPA: 3.11 / 4.00, Honor Degree M.S. Candidate, Electrical-Electronics Engineering (expected graduation date: June 2011) Gaziantep University, Gaziantep / TURKIYE Thesis Topic: Not determined yet Advisor: Not determined yet GPA: N/A
Academic Experience	Teaching and Research Assistant Zirve University, Gaziantep / TURKIYE (October 2009 - Present) Faculty of Engineering, Electrical-Electronics Engineering Department
Research Interests	Data Modeling, Information Theory <ul style="list-style-type: none"> - Data classification with entropy based models - Lossless data compression with several algorithms: <ul style="list-style-type: none"> - Predictive context modeling (a.k.a. context mixing - CM) - Lempel-Ziv and it's derivatives (LZ, LZSS, LZIP, ROLZ) - Burrows-Wheeler transform (BWT) with context mixing (CM) - Symbol Ranking - Lossy / lossless image and audio compression: <ul style="list-style-type: none"> - Discrete cosine transform (DCT) with scalar quantization (JPEG core) - S+P transform (a.k.a. predictive haar wavelet transform) Signal Processing <ul style="list-style-type: none"> - Digital audio enhancement filters, sampling rate conversion and mixing - GPU based high speed filters for still images - Pattern recognition via artificial neural networks on filtered still images - Neural network implementation for lossless predictive data compression - Secondary Symbol Estimation (SSE) for lossless predictive data compression Bioinformatics <ul style="list-style-type: none"> - DNA sequence analysis, modeling and prediction Embedded Design <ul style="list-style-type: none"> - Plug & Play USB HID device development - Detection of object orientation with light sensor array - RS232 supported device development Computer Science <ul style="list-style-type: none"> - Lempel-Ziv compression using Dijkstra's shortest path problem algorithm to catch near-optimal lossless data compression

Computer Skills	Computer Graphics, GPGPU	<ul style="list-style-type: none"> - GPU oriented massively parallel computations via OpenGL - Creating virtual environment with OpenGL - Efficient Binary Space Tree (BSP) implementation for collision detection and static illumination map (lightmap) computation on 3D environments - Simple CAD software development
	Computer Networks	<ul style="list-style-type: none"> - Developing PC software which sniffs and processes raw ethernet packets - TCP/IP communication based on PC applications
	Web Development	<ul style="list-style-type: none"> - Interactive web applications with AJAX+ASP.NET - Database driven web applications with support MsSQL, MySQL or Ms Access - Web services
	Software Development	<ul style="list-style-type: none"> - Database driven PC software development with support MsSQL, MySQL, Ms Access or SQLite3 - Developing OpenGL and DirectX applications with Vertex and Pixel/Fragment Shading capabilities - Developing research programs on Windows NT and POSIX platforms
	Languages	<ul style="list-style-type: none"> - Object Pascal (advanced) - C# (advanced) - C/C++ (intermediate) - x86 Assembly (intermediate) - GLSL – OpenGL Shading Language (intermediate) - MATLAB (intermediate) - HLSL – DirectX Shading Language (beginner) - VHDL (beginner) - PIC Assembly (beginner) - Visual Basic (beginner)
	Microprocessors / Microcontrollers	<ul style="list-style-type: none"> - PIC 18F452 (general purpose) - PIC 18F2550 (general purpose) - PIC 24FJ16GA004 (general purpose)
	Development Environments	<ul style="list-style-type: none"> - Delphi - Visual Studio - MATLAB - Xcode - Code::Blocks - Proteus - Multisim - PIC-C - MPLAB - Delta WPLSoft - Flash
	CAD / 3D Modeling	<ul style="list-style-type: none"> - AutoCAD - Cinema4D with FryRender
	Operation Systems	<ul style="list-style-type: none"> - Windows - Ubuntu - MacOS X - OpenSolaris - FreeBSD (beginner)
	The Others	<ul style="list-style-type: none"> - Photoshop - CorelDraw - Vegas - Ms Office