# M. Adil Yalçın





Dec. 2016

June 2010

# Founder & CEO, Keshif

Senior Visual Data Analyst, Consultant, Developer

Ph.D., Computer Science, University of Maryland, College Park

I am the senior designer and developer of Keshif (www.keshif.me), the next generation out-of-the-box rapid visual data exploration platform. I have over seven years of professional research experience with over 10 publications, including book chapters, and papers in renowned journals and conferences. After 4 years of development and research on Keshif at Human-Computer Interaction Lab, I currently serve as the CEO / CTO / Founder of Keshif, LLC.

# **Education**



#### Ph.D. - Doctor of Philosophy

Computer Science, University of Maryland, College Park, MD, USA

Thesis: A Systematic and Minimalist Approach to Lower Barriers in Visual Data Exploration

Advisors: Niklas Elmqvist, Ben Bederson



#### M.Sc. - Master of Science

Computer Engineering, Bilkent University, Ankara, Turkey

Thesis: Real-Time Simulation and Visualization of Deformations on Heightfields

Advisors: Bülent Özgüç, Tolga Çapın



June 2008

Senior Project: Operational Simulation System - OPSIMUS



Goal

User Interfaces / Visualization / Front End / Design

Development

Data Processing / Back End

Computer Graphics, Simulation

Effective, minimal solutions to complex challenges

JavaScript, HTML5, CSS3, d3, Photoshop, Tableau

SublimeText, less, Version control (git/svn)

Node.is, SQL, Python, Java, Matlab

C++, C, OpenGL / GLSL, OpenCL / Cuda, Lua

# **Publications**

# **Keshif: Rapid and Expressive Tabular Data Exploration for Novices**

M. Adil Yalçın & Niklas Elmqvist & Ben Bederson

TVCG - Transactions on Visualization and Computer Graphics (In pressing)

### Raising the Bars: Evaluating Treemaps vs. Wrapped Bars for Dense Visualization of Sorted Numeric Data

M. Adil Yalçın & Niklas Elmqvist & Ben Bederson

GI 2017 - Graphics Interface

### AggreSet: Rich and Scalable Set Exploration using Visualizations of Element Aggregations

M. Adil Yalçın & Niklas Elmqvist & Ben Bederson

INFOVIS '15 - IEEE Transactions on Visualization and Computer Graphics (Proc. of the VAST / InfoVis / SciVis 2015)

#### **Piled Bars: Dense Visualization of Numeric Data**

M. Adil Yalçın & Niklas Elmqvist & Ben Bederson

GI 2017 - Graphics Interface

#### Cognitive Stages in Visual Data Exploration

M. Adil Yalçın & Niklas Elmqvist & Ben Bederson

BELIV '16 - Proceedings of Beyond Time and Errors: Novel Evaluation Methods for Visualization at IEEE VIS 2016

#### Keshif: Out-of-the-Box Visual and Interactive Data Exploration Environment

M. Adil Yalçın & Niklas Elmqvist & Ben Bederson

VIP '16 - Visualization In Practice Workshop at IEEEVIS

#### Information Visualization

M. Adil Yalcın & Catherine Plaisant

Big Data and Social Sciences - CRC Publishing

### PixelPie: Maximal Poisson-disk Sampling with Rasterization

Cheuk Yiu Ip & M. Adil Yalçın & David Luebke & Amitabh Varshney

HPG '13 - Proceedings of the 5th High-Performance Graphics Conference

#### GPU Algorithms for Diamond-based Multiresolution Terrain Processing

M. Adil Yalcın & Kenneth Weiss & Leila De Floriani

EGPGV '11 - Proceedings of the 11th Eurographics conference on Parallel Graphics and Visualization

### Incorporating Learning Analytics into Basic Course Administration: How to Embrace the Opportunity to Identify Inconsistencies and Inform Responses

Lindsey B. Anderson & Elizabeth E. Gardner & Andrew D. Wolvin & Rowena Kirby-Straker & Adil Yalcin & Ben Bederson

NCA 2015 - 101th Annual meeting of the National Communication Association

#### Real-Time Simulation and Visualization of Deformations on Heightfields

M. Adil Yalçın

M.Sc. Thesis - Bilkent University

#### A Generic Multi-View Rendering Engine Architecture

M. Adil Yalçın & Tolga Çapın

Game Engine Gems Volume 2 - A.K. Peters

CEO, CTO, Founder Making Data Explorable

## Route Visualization in Indoor Panoramic Imagery with Open Area Maps

Mateis Stroila & M. Adil Yalcin & Joe Mays & Narayanan Alwar

ICMEW '12 - IEEE International Conference on Multimedia and Expo Workshops

# Editing Heightfield using History Management and 3D Widgets

M. Adil Yalçın & Tolga Çapın

ISCIS '09 - 24th International Symposium on Computer and Information Sciences

# **Work Experience**

2017-now

Keshif, LLC - Arlington, VA

START (National Consortium for the Study of Terrorism and Responses to Terrorism) - College 2016 - 2017 Park, MD

Researcher & Developer X Keshif, Profiles of Individual Radicalization in the U.S.

2015 - 2016 SESYNC (National Socio-Environmental Synthesis Center) - Annapolis, MD

Teaching and Learning Transformation Center, UMD - College Park, MD

2014 - 2015

Researcher & Developer > Keshif, Education Data Analysis

Researcher & Developer > Keshif, Data to Motivate Synthesis Project

2012 Summer AT&T Labs Research - Florham Park, New Jersey R&D Intern > Free viewpoint synthesis using depth and color sensors

2011 Summer **NAVTEQ** - Chicago

R&D Intern > 3D Indoor navigation application development

University of Maryland - College Park, MD

Teaching Assistant ➤ CMSC250 & CMSC122

3DPHONE - Ankara, Turkey 2009 January - 2010 July

Research Assistant > Graphics Engine / Effects Development

Bilkent University - Ankara, Turkey 2008 - 2010

Teaching Assistant > CS101 & CS123

TUBITAK UZAY - Ankara, Turkey 2007 Summer

Development Intern 🗡 Turkish NLP (Word structure analysis) software development

Simsoft - Ankara, Turkey 2008 Spring

Developer Aircraft Behaviour Modeling

HAVELSAN - Ankara, Turkey 2006 Summer

Development Intern ➤ Stock Tracing Web Service System