

www.gfai.de



## CONTACT

### INSTITUTE

Founded in 1990, GFaI started as a small research association and has developed to an established and global operating research institute since then.

When it comes to technology transfer, GFaI has an exemplary position within the German Research Landscape by successfully transferring innovative research results into industrial products.

### MEMBERSHIP

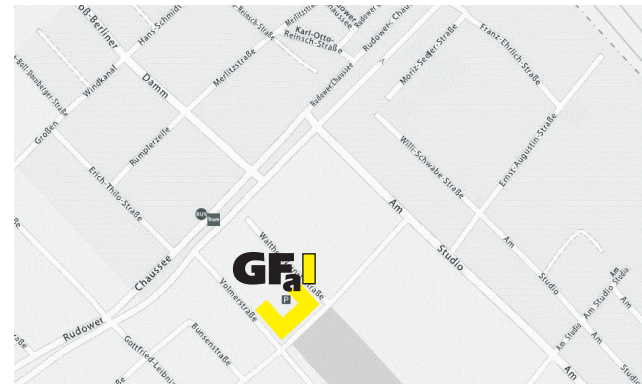
GFaI e. V. acts as an open network of competent partners, linking know-how and expertise from research and practice within the promising field of information technology. About 100 companies, universities and institutions are already members.

### BECOME A MEMBER

You find all important details concerning a membership on our website [www.gfai.de](http://www.gfai.de).

### LOCATION

GFaI is based in the Technology Park Berlin-Adlershof, Germany's most important science, business and media site.



### GFaI

Gesellschaft zur Förderung angewandter Informatik e. V.  
(Society for the Advancement of Applied Computer Science)

Volmerstrasse 3  
D-12489 Berlin  
Germany

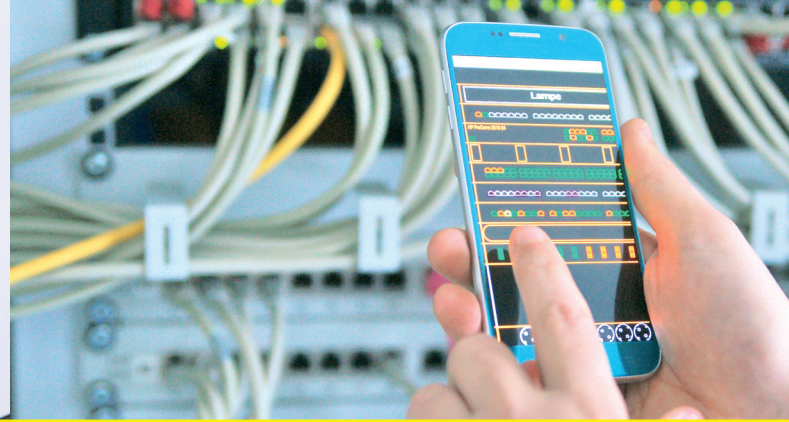
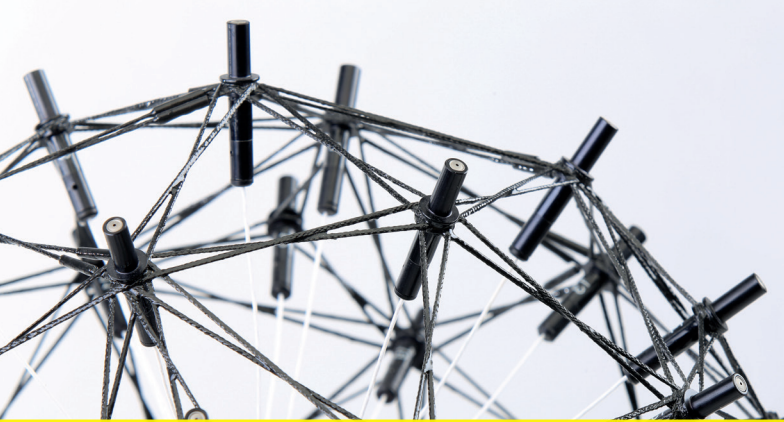
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## RESEARCH INNOVATION TECHNOLOGY

Society for the Advancement  
of Applied Computer Science







## PROFILE

### RESEARCH AND DEVELOPMENT

GFaI is a private non-profit research institute in the field of applied computer science. By providing industry-related and application-oriented research and development services we support our partners and clients in their innovation tasks.

### COOPERATIONS

GFaI is successfully cooperating with various partners from science to industry. As an associated institute of the Beuth University of Applied Sciences Berlin and the HTW University of Applied Sciences Berlin, we actively support the education and training of students. In turn, GFaI is provided direct access to the latest scientific findings.

### ASSOCIATIONS

GFaI is a member of the German Federation of Industrial Research Associations (AiF), the German Industrial Research Community Konrad Zuse (Zuse Gemeinschaft) and the Association of Innovative Companies (VIU).



Mitglied der  
ZUSE-GEMEINSCHAFT



## RESEARCH AREAS



### IMAGE PROCESSING / INDUSTRIAL APPLICATIONS

Smart optical test and measurement technology // Automation and quality management solutions for the manufacturing technology // Programming solutions for industrial robots // Engineering applications // Sensor integration // New programming technologies



### IMAGE PROCESSING / DOCUMENT ANALYSIS

Image analysis in forensic science // Network and web-based database applications // Image processing // Analysis of document-like objects



### 3D-DATA PROCESSING

Non-contact 3D and 4D measurement (HW/SW) // Filtering and processing of 3D scanning results // 3D modeling, tools for analysis and modification of 3D models // 3D system solutions (HW/SW) // User programs // Additive manufacturing and 3D printing



### COMPUTER AIDED FACILITY MANAGEMENT

Modeling methods for complex buildings and technical infrastructure systems; focus IT and safety networks // Simulation technologies // Optimization of area use // Variant planning // Navigation // Escape and rescue routes // Tools for mass data acquisition



### SIGNAL PROCESSING / ACOUSTIC CAMERA

Localization and visualization of acoustic sources in 2D & 3D // Application of beamforming, intensity mapping and acoustic holography // High-channel, parallel and sample-synchronous measurement data acquisition // Design of customer-oriented microphone arrays for test facilities



### GRAPH-BASED ENGINEERING SYSTEMS

Research and analysis of technical systems in reference to their graphical modeling, configuration, design, simulation and optimization // Development of solutions for the application areas energy system technology, production technology and automation technology



### ADAPTIVE MODELING / PATTERN RECOGNITION

Pattern recognition, classification, optimization, regression, Big Data Mining and modeling of adaptive systems // Structural dynamics, vibration analysis, modal analysis, operational deflection shape analysis, transfer path analysis // Circuit design (analog and digital) // Software development (Atmel, Microchip, ARM)



### TEXT MINING SOFTWARE

Syntactic-semantic text analysis // Automatic extraction of specific key facts // Structured collection of facts stored in data bases