

Campus Navigator: Guiding your visitors seamlessly indoor and outdoor

Lars Schmitz

Esri Deutschland

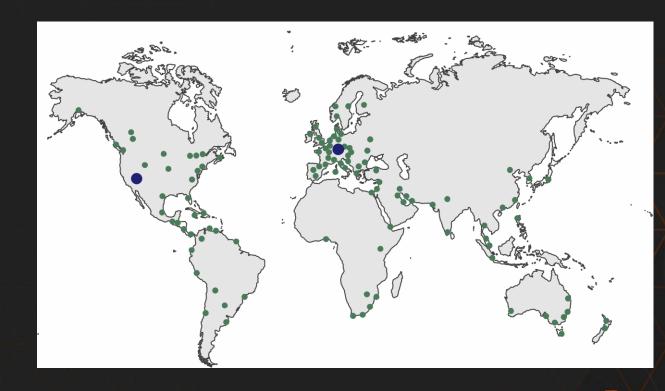
Welcome!



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Esri (Environmental Systems Research Institute)

- Global Market Leader for Geographic Information Systems
- 150.000 Customers with 1 Mio. Users
- 80+ Distributors
- 2.300 Partner
- www.esri.com



Esri Startup Program

https://developers.arcgis.com/startups/

Esri Startup Program

A free three year program that gives emerging businesses the tools to build mapping and location analytics capabilities into their products. Qualifying startups receive online services, software, training and support, content, and other opportunities to help them succeed.

NavVis GmbH

- Member of the Esri Startup Program
- ✓ Spin-off from TU Munich
- Indoor mapping and navigation
- ✓ Market entry Q4 2014
- ✓ Gained top industry leaders as customers by Q4 2015
- ✓ International partner network to >15 today
- Forged first strategic partnerships with key players inc. Esri, Intershop, Hybris, ...

www.navvis.com

Next-level Indoor digitalization

NAVVIS



M3 Trolley

Map complete buildings in hours at an unmatched cost/quality ratio



IndoorViewer

Access your digital building from anywhere via our browser-based IndoorViewer



Navigation App

Get your location - meter accurate and without the need for new infrastructure (computer vision based)

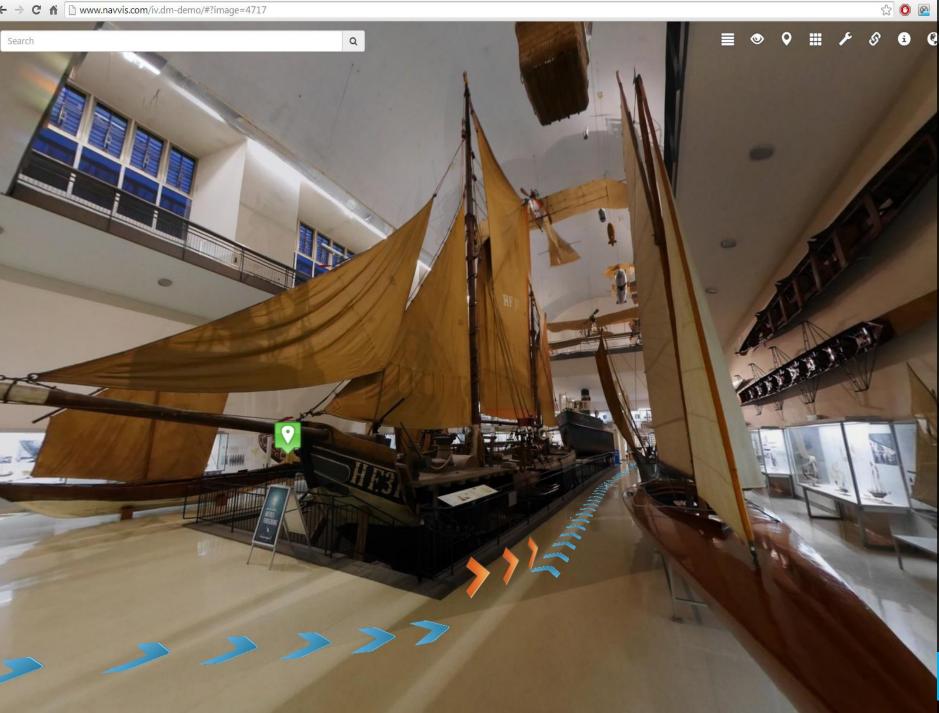


M3 Trolley

Indoor digitalization at scale – scans up to 50.000 m^2 on a single day

- Creates inch-perfect 3D data
- Captures high resolution panoramic images with a brilliant visual quality
- Very easy and intuitive to use press record and capture data on the go
- Automated data-processing optimized for web and CAD import





IndoorViewer

- Browser-based viewer to access and explore your buildings in 3D on any device
- Interact with points-of-interest and connect them to real-world objects
- Route between any two locations
- Measure distances and volumes
- Share your location and points-ofinterest via Mail or Facebook
- Provides a powerful API to integrate IndoorViewer into your SAP, facility management tools, or any other existing infrastructure

Test here



NAVVIS NavVis App

- First indoor navigation app that does not require infrastructure
- Meter-accurate thanks to patented computer vision based algorithms
- Highly scalable due to extremely low setup costs
- Instantaneous localization saves battery and nerves!
- Virtual reality interface for easy orientation
- An ecosystem for 3rd party locationbased services

Esri GIS Talk

GIS Talk

Die deutschsprachige Esri Konferenz 2016

25. und 26. Oktober 2016 im MOC in München • 27. Oktober 2016 in Kranzberg

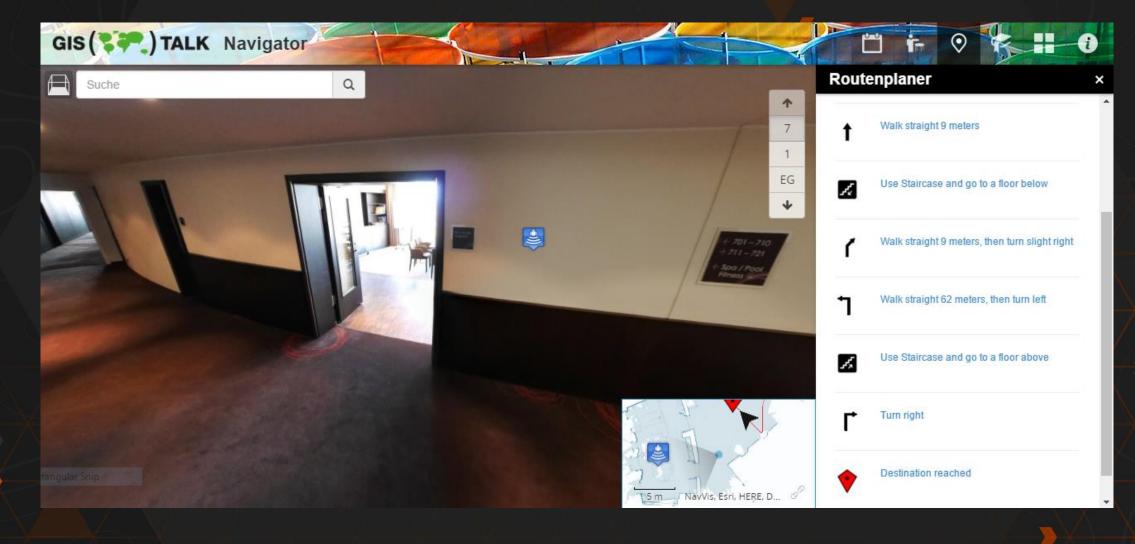
Die Konferenz

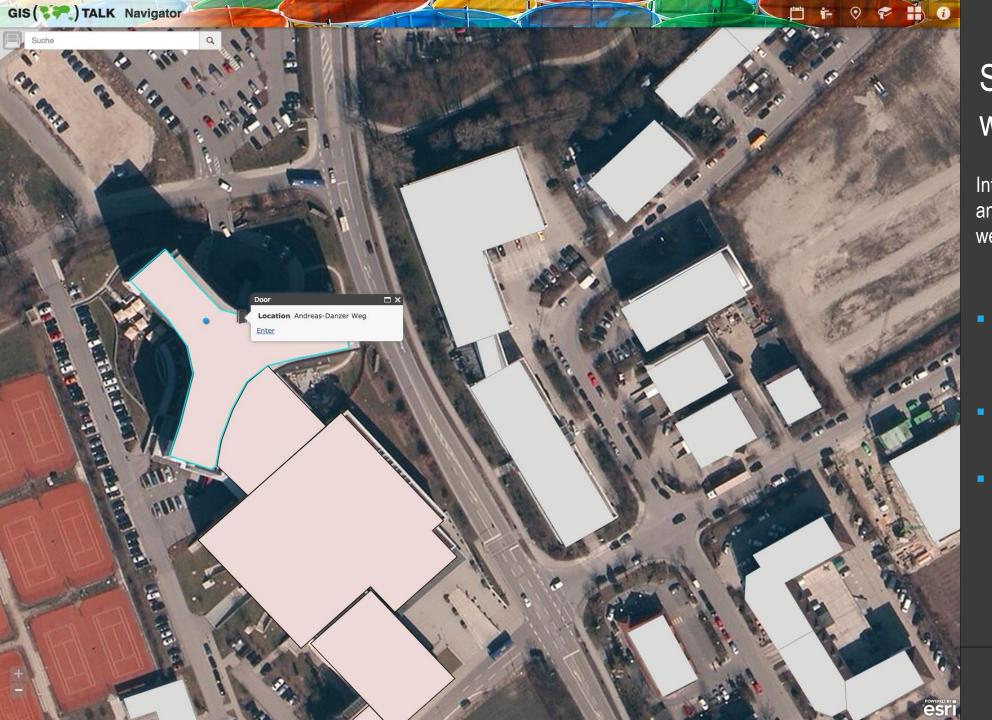
Impressionen 2015

Newsletter

Campus Navigator – Live Demo

http://service02.eggits.net/gistalknavigator/

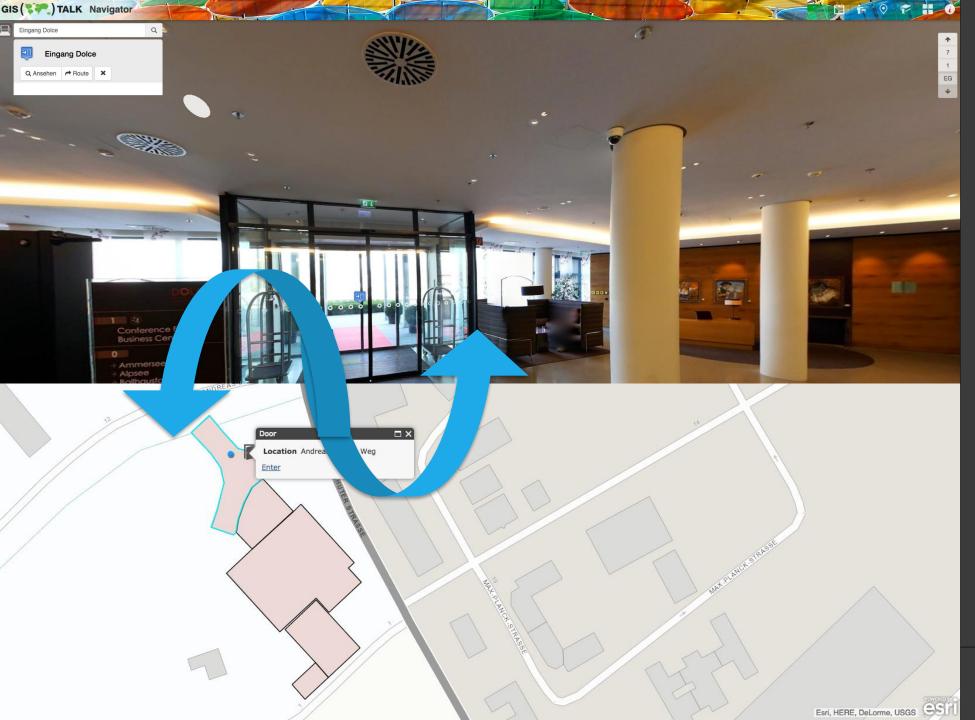




Single-page web app

Integrated functionalities of Esri and NavVis solutions in one single web page

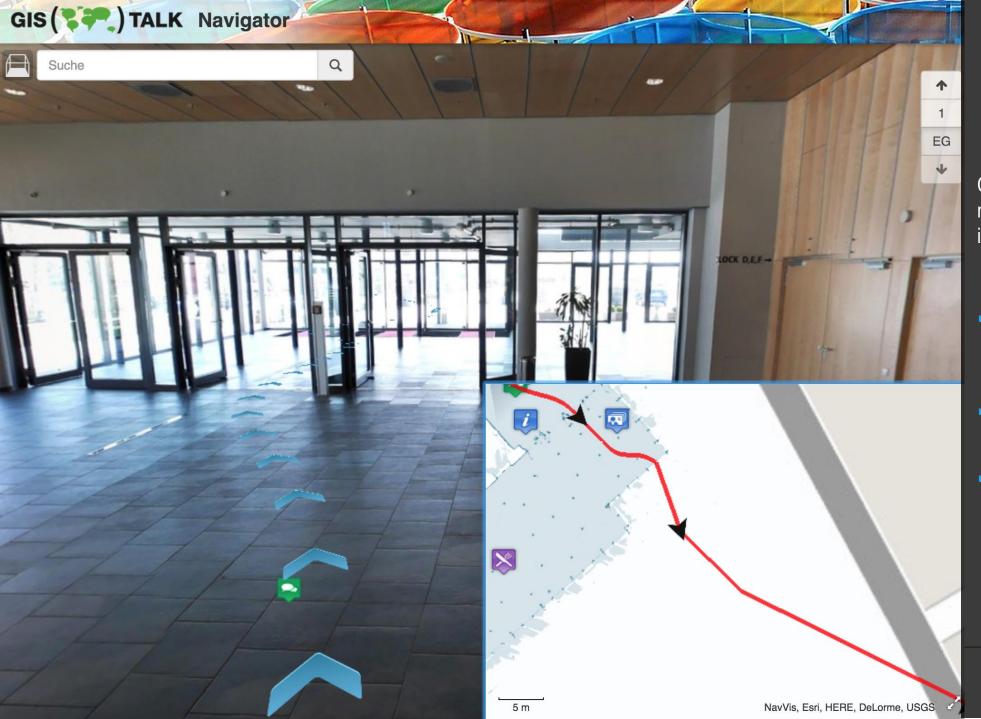
- Allow users to fully experience outdoor and indoor maps at once
- Provide an integrated solution for complex groups of buildings
- Built with Web AppBuilder for ArcGIS



Seamless transition

Switch easily between outdoor and indoor maps

- Enter buildings from the Esri map interface
- Search for any POI or direction from the integrated search bar
- Move from indoor to outdoor view with one single mouse click



Desk-to-desk navigation

Connected nav graphs allow for navigation across outdoor and indoor spaces

- Use the search bar to navigate from within a building to any outside address and vice versa
- See an indoor overview map for better orientation
- Get turn-by-turn directions and a virtual path from your exact location

GIS (TALK Navigator

Conference schedule

Tue

19.05.2015, 10:00 - 17:15 h

Raum	Eibsee	Schliersee	Pilsensee	Bodensee II	Bodensee I	Chiemsee	Ammersee II	Ammersee I	Alpsee	Walchensee	Zugspitze	Badersee	Birkensee	Wörthsee	Kochelsee
Frack	Expertenrunden I	Expertenrunden II	Expertenrunden III	Expertenrunden IV	Expertenrunden V	Technical Session Beginner	Technical Session Beginner	Technical Session Beginner	Technical Session Beginner	Handelsforum **Teilnahme nur mit verbindlicher Einladung	Versicherungsforum **Teilnahme nur mit verbindlicher Einladung	HandsOnSchulungen	HandsOnSchulungen	Telko Forum **Teilnahme nur mit verbindlicher Einladung	Kommunalforum **Teilnahme nur mit verbindlicher Einladung
1 - 2:00 1	Digitale Gesellschaft Prof. Dr. Gerd Buziek Earl, Deutschland Group GmbH	Stadt der Zukunft Dr. Andreas Carstens, Philipp Greiff, Esri Deutschland GmbH	Daten big und smart: Potenziale und Nutzen Gerhard Hartema, Esri Deutschland GmbH	INSPIRE und COPERNICUS – Geodateninfrastrukturen in der EU Prof. Dr. Andreas Wytzisk, Hochschule Bochum, Professur für Geoinformatik	Digitale Infrastrukturen Peter Feuerborn, Tobias Ott, Esri Deutschland GmbH	Räumliche Ana lysen: Aus Daten werden nützliche Informationen Matthias Meiler, Thilo Kaufmann, Esri Deutschland GmbH	ArcGIS Online: Erste Schrittemit ArcGIS in derCloud Matthias Bolkart, Esri Schweiz AG, Esri Deutschland GmbH	Content: Karten finden und nutzen Christer Lorenz, Johannes Fuchs, Esri Deutschland GmbH	GIS für jeden Christin Hufmüller, Stefan Vienken, Esri Deutschland GmbH			Workshop I fürLehrer/innen: Digitale, interaktive Präsentationen mit Geodaten und Karten Susanne Tschirner, Esri	Workshop für Hochschulangehörige: Neues Arbeiten mit ArcGIS für Studierende, Lehrende und Forschende		
									Ra	um anzeigen		Deutschland GmbH	Florian Prummer und Jan Wilkening, Esri Deutschland GmbH		
12:00 1 - 14:00 1	Mittagspause														
4:00 5:00		Plenary Teil 1 Raum: Auditorium													
15:00 1 - 15:30 1	Kaffeepause														
5:30 - 7:15								Plenary To Raum: Audit							

Wed 20.05.2015, 09:00 - 17:50 h

Thu

21.05.2015, 09:00 - 17:50 h

Embedded widgets

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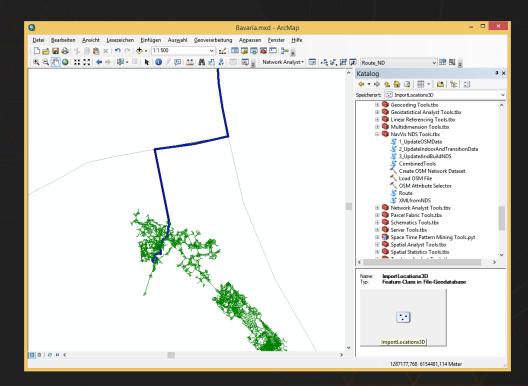
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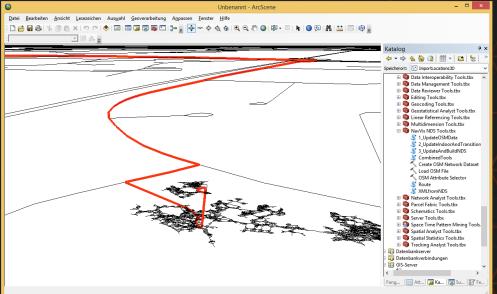
Integrate widgets and tools for visitors and users to enhance their navigation and location experience

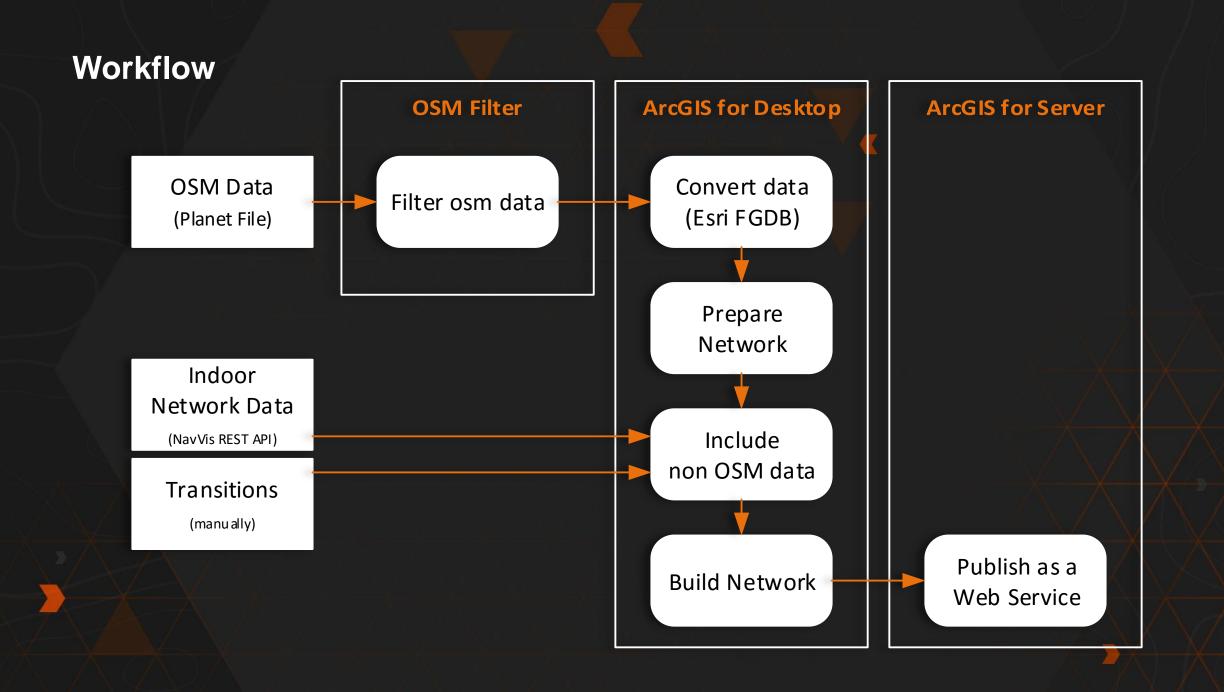
- Include interactive timetables or room schedules to inform and navigate users
- Display directories, help pages, etc. for visitors
- Bookmark POIs
- Integrate existing systems e.g. trade show registration and ticketing

Indoor-Outdoor Routing Network

- Built with customized OSM Editor
 - https://github.com/Esri/arcgis-osm-editor
- Network is 3D ready and uses Web Mercator
- Complete Network consists of:
 - OSM network, NavVis indoor network and transitions
 - Network attributes (hierarchy, oneway, access)
 - Transitions (entrances) need to be created manually







Campus Navigator – Key Points



Single-page web app

Integrate existing applications of Esri and NavVis into one comprehensive user interface



Seamless transition

Switch from outdoor to indoor view easily and use all functionalities of both technologies



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Desk-to-Desk Navigation

Navigate across locations, buildings, and floors – direct $% \left({\left| {{{\rm{users}}} \right|_{\rm{sol}}} \right)$ users to the exact spot they want to go

Embedded Widgets

Provide additional information and tools for your users and enhance their experience

ArcGIS for Developers

http://developers.arcgis.com

The Power of Location

ArcGIS is a mapping platform accessible to developers. It offers an effective way to create and manage geospatial applications. Regardless of your development experience, build web, mobile, and desktop apps that incorporate mapping, visualization, analysis, and more.



JavaScript API - Runtime SDKs (iOS, Android, .Net...) -

Configurable Apps & App Builders 👻



Building Apps

Use ArcGIS to build and deploy apps with spatial capabilities that will inspire your users.



Extending the Platform

Extend ArcGIS products with your own custom functionality and script common workflows.



Accessing Content & Services

Access to a variety of authoritative and curated content and services for use inside your apps.

ArcGIS Web AppBuilder for ArcGIS

https://developers.arcgis.com/web-appbuilder/



Thank You!



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