



# SABAH AL-SHIDIDI

Urban Water & Climate Adaptation Expert | Technical Lead |  
Principal Hydraulic Modeller

CV

2 pages + summary

## PROFILE

### Transforming complex water challenges into sustainable and cost-effective solutions

Hydraulic modeller, technical specialist and project manager with more than 30 years of experience in hydraulic modelling, urban water management, climate adaptation, water systems and flood risk management.

Experienced across consulting, utilities, public authorities, contractors and independent advisory services in Denmark, Sweden and internationally. Combines strong technical expertise with extensive experience in project delivery, technical leadership, quality assurance and professional development.

Throughout his career, Sabah has remained strongly engaged in hands-on technical work including hydraulic analysis, model development, model review and technical problem solving, with a strong preference for remaining actively involved in project delivery. He has also established modelling communities, led national development projects and contributed to the advancement of modern approaches to modelling and climate resilience.

Experienced in working within complex organizations involving multiple stakeholders and creating structure, direction and trust in transformation and development initiatives.

Strong understanding of the interaction between urban development, strategic planning and investigations throughout the community development process.

## ACADEMIC EDUCATION

### Roskilde University Center (RUC) - Denmark

2000–2002

MSc Environmental Policy and Regulation

### Technical University of Denmark (DTU)

1997–2001

MSc Environmental Engineering

## KEY COMPETENCES

### Technical leadership & Project management

- Technical lead for multidisciplinary projects
- Quality assurance and peer review
- Coaching and mentoring
- Stakeholder management
- Project and programme, budget, risk, and quality management
- Strategic advisory services

### Hydraulic Modelling & Analysis

- 1D and 2D hydraulic modelling
- Sewer, stormwater systems and rivers
- Cloudburst and urban flood analysis
- Flood risk assessment
- Climate adaptation and resilience planning
- Urban water management
- Risk and vulnerability assessment

### Strategic & Technical Competences

- Water and wastewater planning and strategic investigations
- Stormwater, SUDS and flood management
- System analyses and decision-support studies
- Urban Water in development projects from planning to implementation
- Renewal planning and Asset Management

## SELECTED ACHIEVEMENTS

- Project Manager for Svenskt Vatten's national guideline development project for sewer system modelling "Guidelines in hydraulic modelling".
- Established and led hydraulic modelling communities within utilities and consulting organisations.
- Developed methodologies for asset management and rehabilitation planning.
- Led complex climate adaptation and flood risk projects across Denmark and Sweden.
- Delivered optimisation initiatives resulting in significant cost savings.
- Driving initiatives related to digitalisation and AI-supported hydraulic modelling.

More information at: [Case studies & project](#) and [Development](#).

## PROFESSIONAL EXPERIENCE

### AYA HYDRO AB – Founder & Technical Lead | 2024-Present, Sweden

- Strategic and technical advisory services.
- Hydraulic modelling and climate adaptation projects.
- Development of AI-assisted workflows.
- Technical support to utilities, municipalities and consulting firms.

### COWI AB – Senior Project Manager | 2022–2024, Sweden

- Led complex wastewater and climate adaptation projects.
- Technical leadership of multidisciplinary teams.
- Technical coordination, quality assurance and project delivery.
- Responsible for finance, planning and project governance.
- Business development and competency support.

## University of Technology, Bagdad – Iraq

1983–1987

BSc Building and Construction  
Engineering

### LANGUAGE SKILLS

English, Danish and Swedish (fluent).

Arabic (Mother tongue)

### SOFTWARE DIGITAL TOOLS

#### Advanced User:

- MIKE+ (All modules), MIKE FLOOD, MIKE URBAN, MIKE 21, MIKE 11, MIKE HYDRO River, MIKE HYDRO Basin, MIKE SHE, etc.
- ArcGIS Pro, QGIS
- SCALGO / SCALGO Dynamic-Tuflow
- Storm Tac
- DANDAS Graf
- MS Project og Gantt Project

#### Working Knowledge:

- HEC-RAS, InfoWorks ICM, Tuflow
- APX10 for urban water Asset management from apx10.com

### DIGITALISATION & AI

- AI-assisted workflows
- Prompt engineering
- Automation of modelling workflows
- Development of AI-supported approaches for hydraulic modelling and analysis

### PROFESSIONAL ACTIVITIES

- International conference speaker.
- Papers and development projects
- Peer Reviewer, International Water Association (IWA) since 2013:
  - [Water Science & Technology](#)
  - [Water Practice & Technology](#)
  - [H2Open journal](#)

### CONTACT INFORMATION

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### ADDRESS

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[218 72 Tygelsjö, SVERIGE](#)

### WEBSITES

<https://shididi.net/>

<https://www.AYAHYDRO.com/>

References available upon request.

## WSP Sverige AB – Senior Project Manager | 2018 – 2022, Sweden

- Hydraulic modelling projects – urban water and rivers.
- Flood risk and climate adaptation studies.
- Mentoring and professional development.
- Development of internal training programmes.

## MT Højgaard A/S – Senior Design Engineer | 2017 – 2018, Denmark

- Hydraulic design and modelling.
- Infrastructure projects
- Technical coordination and design review.

## Hillerød Utility – Project Manager | 2015–2017, Denmark

- Urban water planning.
- Asset management development.
- Design & hydraulic modelling of SUDS and climate adaptation solutions.
- Climate adaptation projects.

## SWECO, Stockholm – Project Manager & Specialist | 2013–2015, Sweden

- Project Manager for Svenskt Vatten's modelling guideline programme.
- Risk assessment and advanced hydraulic modelling including the 14 km Bromma Tunnel project.
- Methodology development and competency support.

## BIOFOS / Avedøre Wastewater Center – Project Manager & Specialist | 2010–2013, Denmark

- Head of modelling team.
- Strategic modelling projects and climate adaptation studies.
- Development of modelling standards.
- Analyses of extreme rainfall and flood risks including Copenhagen disaster rain event in July 2011.

## Egedal Utility / NOVAFOS – Project Manager & Specialist | 2005–2010, Denmark

- Development of radar-based Rain Information System and forecasting.
- Hydraulic modelling and urban water planning.
- Urban water production, renewal and development projects from A to Z.
- Utility strategic investment planning.

## Frederiksborgs County – Specialist | 2004–2005, Denmark

- Environmental / wastewater regulation and permitting activities.
- Hydraulic modelling and analysis of rain-dependent discharges.

## PREVIOUS EXPERIENCE

### DTU – TEACHING ASSISTANT MSC COURSES | 2000 – 2002 DENMARK

- MSc course support, teaching material preparation and lecturing.
- Students supervision and support.

### PREVIOUS EXPERIENCE - IRAQ | 1984 – 1996

- Design, project management and construction management within urban water, river and infrastructure projects.
- Project implementation, coordination and production in multidisciplinary project environments.

## MORE INFORMATION

CV @ <https://shididi.net/cv>

Courses @ <https://shididi.net/courses>

Conferences @ <https://shididi.net/conferences>

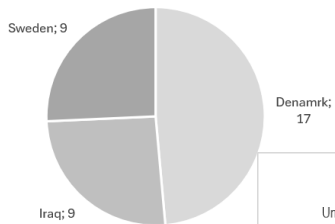
Publications @ <https://shididi.net/publications>

Reference projects @ <https://shididi.net/projects> and @ <https://shididi.net/case-studies>

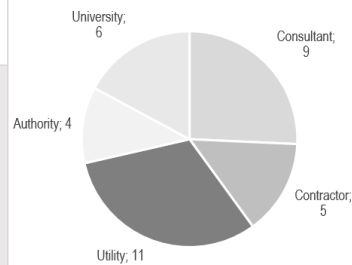
## PROFESSIONAL EXPERIENCE – SUMMARY

Period	Employer	Employer category	Titel	Hydrologic and hydraulik modelling and design	Advanced GIS and analyser	Cloudburst, flood, and climate change	Water and draingae plans, strategies and investigations	River and dam safety	Rainwater and LID	Development projects	Leadership: Team building, competence development, sharing and mentorship	Leadership: Project and Economy management	Client relations and cosumer care	Design of drainage systems	Cost-benefit analysis	Urban development projects from A to Z	Asset Management	Bidding and contracts
2023 - Now	AYA HYDRO AB	Consultant	CEO and Technical director															
2022 – 2024	COWI AB	Consultant	Senior Project manager															
2018 – 2022	WSP Sverige	Consultant	Senior Project manager															
2017 – 2018	MT Højgaard Group_DK	Contractor	Senior Design Engineer															
2015 – 2017	Hillerød Forsyning_DK	Utility	Projekt manager															
2013 – 2015	Sweco Environment AB – Region Öst vatten_Stockholm	Consultant	Project manager, specialist															
2010 – 2013	Spildevandscenter Avedøre (SCA) BIOFOS now_DK	Utility	Project manager, specialist															
2005 – 2010	Egedal Forsyning A/S - NOVAFOS now_DK	Utility	Project manager, specialist															
2004 – 2005	Frederiksborg Amt (Län Nordsjælland), Hillerød-DK	Authority	Specialist															
1997 – 2003	DTU, RUC (Education, language courses and a job as teaching assistant).	University	Student /Teaching assistant															
1991 – 1996	Kermasha Engineering & Contracting Association, Baghdad-Iraq	Contractor	Projekt manager															
1987 -1991	Military Projects Commission, Ministry of Defense, Iraq	Authority	Projekt manager															
1984 – 1987	Kermasha Engineering & Contracting Association, Bagdad-Iraq	Contractor	Practice engineering student															

No. of Years



No. of Years



Period in experience (year)

