

## Research interactive Riverdynamics

Ondertitel: proof of concept Uflow hydro

**Standplaats** Delft, Amersfoort, and/or Rotterdam  
**Werkgebied** Water



### Algemene informatie The Company

ARCADIS is an international company providing engineering and design services in the Environment planning & constructions. With 2400 employees in the Netherlands and more than 21000 across the world, we serve public and private sector clients. To achieve solutions we offer our employees an inspiring, challenging and safe working environment with good working terms.

For ARCADIS, 'water' means much more than water alone. We work on developing solutions that also benefit nature, the landscape, residential and commercial areas, the environment and the climate. We offer our clients solutions and services in the field of coasts and rivers, water management and rural development, water cycle, ports, offshore and waterways & constructions.

### Functieomschrijving Job description

Do you remember yourself as a child enjoying play with sand and running water? Enable us to give students the same entertainment, to give the world open access to interactive hydrodynamic simulation and to fundamentally improve collaborate river design by codeveloping the 'Uflow app'.

What will you do during this research internship? Create, using your skills and energy, important building blocks for the Uflow app environment. Adapt existing numerical simulation techniques (e.g. pocket pond) to new requirements for education and [sustainable river development](#).

Environmental impact assessment of brooks, creeks and rivers comprises a part of our field of work. Within this field hydrodynamic simulations are widespread and common. Within the project Uflow we ([Arcadis](#), University of applied economics Rotterdam (<http://www.hogeschool-rotterdam.nl>), University of applied sciences Utrecht (<http://international.hu.nl/>) investigate options for immediate human machine interaction for the simulation of brooks, creeks and rivers.

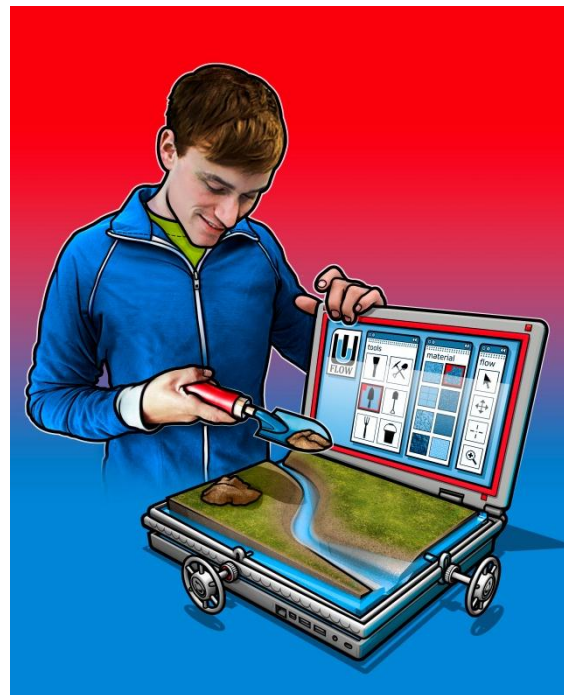
In this part of the research we want to experience immediate connection between human manipulation and simulation response. We want to show not only that it is technically feasible but also that it does enable new kinds of learning from hydrodynamic system (river) behavior. These two are the purposes of this research proposal.

### Wat vragen wij? What do we ask?

The candidate will graduate in the field of applied mathematics. A clear understanding of advanced numerical mathematics is required. Furthermore, the candidate needs to familiarize him or herself with computational fluid dynamics and several existing numerical fluid flow solvers.

### Wat bieden wij?

ARCADIS offers internships and graduation assignments at several business services. Each year dozens of



students from a wide range of disciplines are following an internship at our company. Working side by side with our professionals, you'll gain experience and "trying us on for size" to see if your skills and interests match up with ARCADIS' culture and opportunities.

In this highly challenging research you will be guided and supported by one technical specialist from Arcadis and one specialist from Vortech.

### **Contactinformatie**

#### **Contact details**

If you are interested in this position, please contact Seline van Remundt, Recruitment department, on tel. (+31) 06 - 27060239 or via [seline.vanremundt@arcadis.nl](mailto:seline.vanremundt@arcadis.nl). You can apply by using the 'Solliciteren'-button at this page.

**Recruitment agencies need not respond. Details from this vacancy are not to be used for marketing purposes.**

