# J2 Offshore Development

# Curriculum Vitae

*Joakim Holmquist*
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## Summary

Joakim Holmquist graduated at Lund University in 2001 after finished his master thesis at Hoganas AB.

After finished his master degree in Engineering Physics Joakim read some additional courses in economy at the Lund Institute of Technology and he continued to study economics at the Lund University.

During the 7 years work as consultant Joakim has performed structural/hydrodynamic analyses of semi-submersibles for the clients GVA Consultants AB (KBR company), Grenland Group AS and Aker Solutions AS. Linear and non-linear FE-analyses have been executed using SESAM or ABAQUS and both shell and solid elements have been used in the analyses. The design calculations have been checked against rules from ABS (The American Bureau of Shipping) and DNV (Det Norske Veritas).

In addition to the work as structural engineer Joakim has worked as software support engineer for one year at Volvo Information Technology.

In 2009 Joakim together with an old colleague started the consultant company J2 Offshore Development AB.

## Formal education

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|---|---|---|
| 1994-1996 | **Tycho Braheskolan** The Natural Science Programme *upper secondary school level* | Helsingborg |
| 1996-2000 | **Lund University** Master of Science in Engineering Physics | Lund |
| 2000 | **Lund University** *Economics 20 p* | Lund |

## Professional background

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|---|---|---|
| 1995-1996 | Tycho Braheskolan | Helsingborg |
| | **Teacher assistant in mathematics and network technician** | |
| 1997-2000 | Telia AB | Helsingborg |
| | **Telephone technician (deputy during holidays)** | |

2000    Lund university    Lund
**Techer in practical subject**
- Teacher in exercise mechanics for students of technology

2001-2004  Caran AB    Gothenburg
**Structural engineer**

VOLVO and SAAB
- FE-modeling of 5 BiW models intended for crash, structural and NVH analysis.

Jobs for GVA Consultants (Haliburton)
GVA Consultants, ”Thunder Horse PDQ”
- Hydrodynamic/structural calculations on hard pipes, drainage pipes and I-tubes etc.
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GVA Consultants, ”Atlantis PQ”
- Hydrodynamic calculations on hard pipes, skim piles and drainage pipes etc. Structural calculations (FE) on column stringers, riser porches, upper hull - module support and drainage pipes. Buckling analysis of column shell and stringers.
*Wagening, the Netherlands*
- Model test of Atlantis PQ, aug 2002

GVA Consultants, ”Khazar PQ”
- Motion and air gap analysis of Khazar PQ, WADAM.

GVA Consultants, ”8086 PQ”
- Motion and air gap analysis of 8086 PQ, WADAM

GVA Consultants, ”Atlantis PQ” POST-FEED
- Technical support to the construction site at DSME in Korea.

2004-2005  Epsilon Hightech AB  Gothenburg
**Structural engineer**

SAAB Rosemount AB
- Analysis of steel waveguide. Calculation of resonance frequency using MSC. NASTRAN and hand calculations.
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GDA Sverige AB
- Analysis of web frames in submersible. Calculation of buckling strength using hand calculations.

Ringhals AB
- Analysis of pre-tension of bolts in screw joint reinforcement of the PS-dome cover at Ringhals (nuclear plant). Modeling in ANSA and analysis in ABAQUS (solid elements).

Volvo Car Corporation
- Analysis of support structure for an industrial robot. Fatigue loads and ultimate loads considered. Modeling in ANSA and analysis in ABAQUS.

Bodycote AB
- Analysis of creep/friction phenomena of a riser/umbilical for a FPSO. Modeling in ANSA and analysis in LS/DYNA (solid elements).

GVA Consultants, "Kristin FPU"
- Skid out and mating analysis of Kristin FPU. Hand-calculations and DNV/SESAM.

GVA Consultants, "Atlantis PQ"
- Buckling analysis for the Dry tow. Hand calculations and DNV/STIPLA.
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Volvo Information Technology, dept Analysis Systems
- VCC CAE support team. UNIX script, queue systems (LSF and PBS), license managing (Flexlm) and general support for FE-software (ABAQUS, NASTRAN, RADIOSS and others)

2005-2006      Technogarden  AS          Oslo
**Structural engineer**

Grenland Group AS, Norway
- Structural analysis of Blackford Dolphin (Aker H3 design). FE-analysis for FLS (stochastic) and ULS (SESAM), hand calculations (DNV regulations) and beam software (STAAD)

2006-2008      Aker Advantage AS          Oslo
**Senior structural engineer**

Aker Solutions AS, Norway
- Structural analysis of Aker H6-e. Main steel calculations using FE-analysis for ULS and FLS (SESAM/ABAQUS/PULS/STIPLA/STOFAT), hand calculations (DNV regulations)

2008-2009      IKM Consultant  AS
**Senior structural engineer**

Grenland Group AS, Norway
- Structural analysis of Awilco GM4000 semi-sub. Main steel calculations of ULS and FLS (stochastic) using FE-analysis (PATRAN/SESAM/STOFAT) and beam software (STAAD).

# *J2* Offshore Development

2010-2010      J2 Offshore Development  AB
 **Senior structural engineer**

Grenland Group AS, Norway
-   Structural analysis of Awilco GM4000 semi-sub. Main
    steel calculations of ULS and FLS (stochastic) using FE-
    analysis (PATRAN/SESAM/STOFAT) and beam
    software (STAAD). Site work at Yantai Raffles in China.

2010-2010      J2 Offshore Development  AB
 **Senior structural engineer**

GVA Consultants , Sweden
-   Hydrodynamic calculations for FPSO.

| *Supplement education* | | | |
|---|---|---|---|
| | 1998 | **Theory of options** | Lund |
| | 2001 | **MSC, Nastran/Patran** | Gothenburg |
| | 2002 | **French, basic course** | Gothenburg |
| | 2002 | **Hydrodynamic** | Gothenburg |
| | 2002 | **Simulink, basic course** | Lund |

## *Miscellaneous*

**Driving license**
-   class *B*****

**Language**
-   Swedish – mother tongue
-   English – fluent
-   German –  basic
-   French –  basic

**Specification of analysis instruments**
-   DNV Software: SESAM, PATRAN, PULS, STIPLA,
    GENIE, WADAM, MIMOSA,
-   ABAQUS IMPLICIT/EXPLICIT, NASTRAN, ANSA,
    METAPOST
-   ORCAFLEX, STAAD
-   AUTOCAD (beginner), PDMS (beginner)
-   MATLAB, MATHCAD, MS-OFFICE/VBA, PROARC
-   PASCAL,VBA

## *International conferences*

**MC2 - meeting**                 Helsingborg

-   Metal powder conference, June 2001 at Marina Plaza.