

# Ilya Kravets | Structural Analysis engineer

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+972-559101229, Modi'in-Maccabim-Re'ut, Israel

See my full work experience on the website: <https://ilyakravets.wixsite.com/resume>

- ✓ 11 years of experience in structural analysis using FEA tools (FEMAP and other), Python programming and Excel calculations per theoretical methods;
- ✓ Performing of Static, Dynamic, and Fatigue analysis of aircraft structures; making certification reports;
- ✓ 7 years of experience in an international company (**Moscow Boeing Design Center**) as a contract stress engineer, close interaction with engineers in the USA; verbal and written communication skills in English;
- ✓ Professional user of **FEA tools (FEMAP, MSC Patran / Nastran), Excel spreadsheets with VBA programming, SolidWorks Simulation, ISAMI (Airbus stress tool), Office.**

## Work experience



**June, 2019 – Now**

**Stress Analysis Engineer, BIRD Aerosystems, Herzliya, Israel**

*Airborne missile protection systems and airborne surveillance, information and observation solutions.*

- FEA model development and post-processing using FEMAP with NX Nastran;
- Performing static and dynamic analysis (modal and vibration analysis) of metallic and composite structures per FAR, MIL-STD;
- Python and FEMAP API programming to increase efficiency in structural analysis;
- Detailed hand calculations in Excel spreadsheets by theoretical methods per classic structural analysis books (Bruhn, Niu, and others). Providing certification reports and summary presentations.



**December, 2018 – March, 2019**

**Stress Analysis and Design Engineer, Carmor Integrated Vehicle Solutions Ltd, Nof HaGalil, North, Israel**

*Designated vehicles for fire-fighting and aircraft refueling, riot control, tankers, and trailers.*

- Structural analysis in SolidWorks Simulation - "Mantis" tactical armored vehicle project. Preparing the analyzed FEA model to ballistic testing against mines and improvised explosive devices.

**January, 2013 - April, 2018      Stress Analysis Engineer, Progresstech Ltd, Moscow, Russia**

*Engineering consulting services for the aerospace industry.*



Contract stress engineer on Boeing projects, Boeing Design Center, Moscow, Russia

- Boeing 787 project – stress support of the manufacturing process, static and fatigue analysis;
- Boeing 737 Service project – the static and fatigue structural analysis by FEA and Boeing tools and development of new repair manuals for the fuselage structure according to the analysis results.



Contract stress engineer on Airbus projects, Airbus office, Moscow, Russia

- Airbus A350 XWB Fuselage project – passenger door surround area, using FEA (MSC Patran / Nastran), ISAMI (Airbus stress tool), and development of macro for Excel spreadsheets, VBA programming to optimize the analysis process.

**August, 2011 - December, 2012      Stress Analysis Engineer, Boeing Design Center, NIK Ltd, Moscow, Russia**

*Engineering and consulting services for the aircraft industry.*

- Boeing 787 project – structural analysis of system fittings, and brackets in the wing section of aircraft.

## Education

**2010 - 2011      Southern Federal University, Taganrog, Russia**

Master of Engineering - MEng in Aircraft Design Engineering. I graduated summa cum laude.

**2006 - 2010      Southern Federal University, Taganrog, Russia**

Bachelor of Engineering - BE in Aircraft Design Engineering. I graduated summa cum laude.

## Languages

Russian Native

English Fluent

Hebrew Advanced

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