

19. september 2006



# Screencast as a replacement of routine teaching

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# What is a screencast?

- Screencast is a recording of computer display output
- Usually contains also the lecturers commentaries in audio form
- The output is a video file

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# What kind of teaching is a “routine”?

- Solving standard exercises in seminars of mathematics, physics or chemistry
- Explanations about how to use the computer programs
- Explanations about how to write the reports of laboratory works
- etc

[mms://193.40.5.165/2005/Toomas\\_Plank/EM0\\_741.wmv](mms://193.40.5.165/2005/Toomas_Plank/EM0_741.wmv)

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# TARTU ÜLIKOOL In the case of a screen- cast, every student can...

- ... choose the appropriate
  - place for learning,
  - time of learning,
  - speed of lesson.
- ... stop watching the video and try everything learned in practice.
- ... turn back the video, if necessary, and repeat the unclear moments.

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# In the case of a screen- cast can the teacher ...

- ... save time
  - it is possible to deliver lectures with many groups just once,
  - also those students, who missed the auditory lecture, can participateor in other words – the teacher can avoid speaking several times about the same subject.
  - already recorded screencast can be usually used several years.
- ... in seminars concentrate to the solving of concrete problems of concrete students.

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# What do you need for recording a screencast?

## Hardware

- Relatively good/expensive computer
- Microphone
- Web- or videocamera



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# What do you need for recording a screencast?

For recording close-up's you might need videocamera or digital quality-photocamera

## Software

- Look:

<http://en.wikipedia.org/wiki/Screencast>

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ScreenCasters - DonationCoder.com - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <http://www.donationcoder.com/Reviews/Archive/ScreenCasting/> Go Links

Google Search 4 blocked Check AutoLink AutoFill Options

**5-STAR AWARD**

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**UPDATED 6/08/06**  
Removed ViewletCam from Best list.

**UPDATED 6/22/05**  
Added discount info.

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**BEST SCREENCASTERS**  
[Macromedia Captivate](#)  
[BB FlashBack](#)  
[Camtasia Studio](#)

**OTHER SCREENCASTERS**  
[Darbon ViewletCam](#)


**BEST SCREENCASTING TOOL**

**ScreenCasting** is the new hip term for recording movies of your computer desktop as you demonstrate some program.


The name is a bit misleading because you aren't actually broadcasting demonstrations live - you're recording movies to post on your website (or send via email, etc.). But then when the [cult-of-apple](#) types decide they need a new term for an old thing, there's no sense trying to fight it and you might as well go along for the ride.

Regardless of whether you call it screencasting or **demo movie recording**, a new breed of tools (combined with the market penetration of Macromedia Flash) is making it easier and easier for home users to produce software demonstrations.


After an exhaustive review of screencasting software, which involved making dozens of demo movies spanning several full hours of video, we narrowed down the list of best screencasting tools to a small handfull. We tried hard to choose a single best tool from this set of top contenders, but in the end we decided that we couldn't pick a single winner. Instead, this review represents the first **shared Best-in-Class award** at DonationCoder.com:



**TechSmith Camtasia Studio**  
BEST Fast-motion/Quality  
BEST Editing



**BB FlashBack**  
BEST Price (express ed.)  
BEST Low-bandwidth



**Macromedia Captivate**  
BEST interaction, quiz, scripting

Internet





# What kind of software to use?

- Compare:

<http://www.donationcoder.com/Reviews/Archive/ScreenCasting/>

- Three best programs were chosen:

- **TechSmith Camtasia Studio**

- Best quality of recording fast movement
- Best possibilities for corrections (after recording)

- **BB FlashBack**

- Best price
- Best result at low data rate

- **Macromedia Captivate**

- Best for scripting
- Best for creating interactive possibilities into you video

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# How difficult is the recording of a screencast?

- Camtasia Studio has a PowerPointi package
- Parameters
  - How many frames per second?
  - What should be the audio quality?
  - Do we record also the teachers face and movements (picture-in-picture possibility)
  - Do we display PIP also during the recording?
- After determination of those parameters you just need to deliver your lecture as good as possible 😊

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Microsoft PowerPoint - [Ekraanivisioon]

File Edit View Insert Format Tools

Record

1  
2  
3  
4  
5  
6

Click to add notes

Slide 1 of 11

### Camtasia Studio Add-In Options

**Program**

- Start recording paused
- Record mouse cursor
  - Highlight cursor
- Stop recording at end of presentation
- Edit in Camtasia Studio when finished

Include watermark [Watermark...](#)

**Video and Audio**

Video Frame rate: 25 [Advanced...](#)

- Record audio

Audio source: Microphone only

Volume:

**Picture In Picture**

- Record from camera [Camera Setup...](#)

**Record Hotkey**

	CTRL	SHIFT	ALT	
Record/Pause	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	F9
Stop	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	F10

OK Cancel Help

**Camtasia Studio - haapsalu.camproj**

File Edit View Play Tools Help

Task List

- Record the screen
- Edit
  - Picture-in-Picture (PIP)...
  - Transitions...
  - Callouts...
  - Zoom-n-Pan...
  - Flash Quiz...
  - Captions...
- Produce
  - Produce video as...

Clip Bin

Drag your clips from the Clip Bin to the Timeline video.

Camtasia Recording File

Haapsalu\_esimene... Haapsalu\_kolmas.ca

Video Preview

Method Professional - [Untitled: 1]

File Edit View Insert Format Math Symbolics Window Help

Normal Arial 10

Näide MathCAD1 kasutamisest võimalusist Esitla

0:06:06.14 / 0:15:20.51

Timeline

00:00 0:01:20.00 0:02:40.00 0:04:00.00 0:05:20.00 0:06:40.00

- Markers

Video

Haapsalu\_sissejuhatus.wmv

haapsalu\_esimene\_Screen.avi

haapsalu\_teine

haapsalu\_...

Audio 1

Audio 1

Audio 1

Audio 1

Audio 1

Callouts

Callouts

Callouts

Callouts

Callouts

Callouts

PIP

PIP

PIP

PIP

haapsalu\_esimene\_Camera.wmv

haapsalu\_teine

haapsalu\_te...

PIP Audio

PIP Audio

PIP Audio

PIP Audio

PIP Audio

PIP Audio

Ready



# What really takes time?

- Choosing the place of recordings
  - Background should be in light colours
  - Without many small details
- Choosing the best clothing
  - Depends on the quality of a videocamera used
  - In general, clothing in light colours give also here the best result

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# What really takes time?

- **Choice of output format and data rate:** it is a compromise between good quality and possibilities of an average user computer
  - The more the data rate the more you can put information inside.
  - What formats are supported by users computer?
  - What datarate is possible to play in users computer?
  - What is the internet band rate between video server and users computer?

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# Preliminary response

- My first results (in estonian) you can see at

<http://www.fk.ut.ee/content/view/full/2129/>

- Students response was positive: “Video lectures are great idea”
- One of comments from last year graduate: “Why they did not teach us [in seminars of physics laboratory works] in that way...”

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